DESTROYED

DOCUMENT RESUME

ED 100 444 JC 750 073

AUTHOR	Gillie, Angelo C., Ed.
TITLE	Post-Secondary Occupational Education: An Overview and Strategies. Papers presented at the Pennsylvania Conference on Post-Secondary Occupational Education, October 6-8, 1969.
INSTITUTION	Pennsylvania State Univ., University Park. Center for the Study of Higher Education.
PUB DATE	Jan 70
NOTE	156p.
EDRS PRICE	MF-$0.75 HC-$7.80 PLUS POSTAGE
DESCRIPTORS	Administrative Organization; Advisory Committees; Area Vocational Schools; Career Planning; *Conference Reports; Cooperative Education; *Junior Colleges; Occupational Guidance; *Post Secondary Education; Statewide Planning; *Vocational Counseling; *Vocational Education
IDENTIFIERS	Pennsylvania

ABSTRACT

The purposes of the first annual Pennsylvania conference on postsecondary occupational education were to consider the role of area vocational schools, 2-year colleges, and senior colleges in a total program of occupational education; to provide participants an opportunity to exchange ideas on the various typics; to improve the expertise of the participants; and to initiate a series of cooperative ventures between the Pennsylvania State University and other Pennsylvania institutions which are aimed at contributing to the overall improvement of occupational education. To achieve these objectives 20 papers were presented concerning the role of community colleges in occupational education, cooperative education programs, career planning and vocational guidance, organizational and administrative patterns, and curriculum advisory committees. The text of the papers, an evaluation of the conference, the conference program, its registration list, and its advisory committee are presented in the report. (AH)

ED 100444

U.S. DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

POST-SECONDARY OCCUPATIONAL EDUCATION: AN OVERVIEW AND STRATEGIES

Edited by ANGELO C. GILLIE

BEST COPY AVAILABLE

Papers presented at the Pennsylvania Conference on Post-Secondary Occupational Education

JANUARY
1970

THE CENTER FOR THE STUDY OF HIGHER EDUCATION

The Pennsylvania State University · · · University Park, PA 16802

JC 750 073

The Pennsylvania Conference on Post-Secondary Occupational Education

Edited by Angelo C. Gillie

Title	Page No.
Preface	i
1. Introduction: Pennsylvania Post-Secondary Occupational Education: 1969 . . . . . Angelo C. Gillie	1
2. Occupational Education in Community Colleges Today and in 1980 . . . . . Lewis R. Fibel	14
3. The Role of the Pennsylvania Community Colleges in Post-Secondary Occupational Education . . . . . Allen T. Bonnell	25
4. Post-Secondary Occupational Education and the Pennsylvania Master Plan for Higher Education . . . . . Louis W. Bender	40
5. Introduction: Strategies for Resolving Selected Student Related Problems. . . . . Wilmot F. Oliver	48
6. Successful Strategies for Student Recruitment, Planning, and Cooperative Work Experiences. . . . . S. Hartley Johnston	50
7. The Relevancy and Implementation of Career Planning Services. . . . . Gene F. Ventura	58
8. Cooperative Work Experience . . . . . William R. Ferencz	67
9. Introduction: The Role of Guidance in Student Diagnosis and Curriculum Choice . . . . . George W. Elison	75
10. The Place and Purpose of Vocational Guidance in an Educational Setting . . . . . John A. Rebert	77

Title Page No.

11. With Emphasis on Diagnosis. 87
Robert M. Hontz

12. The Role of Guidance in Student Diagnosis and Admissions 89
Robert Gebhardtsbauer

13. Introduction: Organizational Patterns Most Conducive for the Development and Conduct of Occupational Programs 95
Harold E. Farneth

14. An Administrative Unit Combining the AVTS and the Community College 97
Kenneth E. Carl

15. An Integrated Administration Pattern. 100
William A. Koehnline

16. Politics, Institutional Priorities, Fiscal Support, and Instructional Problems Relating to Post-Secondary Vocational Education. 108
L. W. deMarrais

17. Introduction: The Establishment and Utilization of Advisory Committees 111
Donald L. Hagen

18. A President's View of the Establishment and Utilization of Curriculum Advisory Committees 112
James D. Lawson

19. Utilization of Advisory Committees by the Faculty . . . 116
Paul Maleskey

20. The Advisory Committee as Viewed by a Lay Member. . . . 121
Herman Beam,

21. Evaluation and Conclusions. 125
Angelo C. Gillie

22. Appendices. 131

PREFACE

The idea of conducting "The Pennsylvania Conference on Post-Secondary Occupational Education" was discussed by Robert Knoebel (Director of the Bureau of Community Colleges) and this writer in a conversation at the AAJC Convention in Atlanta last March. By early May, a Conference Advisory Committee, chaired by Mr. Robert L. Sheppard, Chief of the Occupational Education Division of the Bureau of Community Colleges, was formed. The committee was gradually enlarged until it included the following persons: James P. Bressler, George Elison, Harold Farneth, Dennis A. Hawkes, E. Jerome Kern, Richard Skinner, and Wilmot Oliver. The program of the conference was designed with active assistance from this committee, and most of the topics for the papers were suggested by them.

The success of the conference, as indicated by the evaluation results, also is an encouraging indication of the great potential that exists for cooperative ventures of this sort. The conference had three active sponsors: The Bureau of Community Colleges of the State Department of Education, along with The Center for the Study of Higher Education and the Department of Vocational Education - both of The Pennsylvania State University. Support for this event was also derived from the Bureau of Vocational, Technical and Continuing Education of the Pennsylvania Department of Education.

The writer wishes to express thanks to all of the above for the cooperative effort that enabled us to conduct the first state-wide conference on post-secondary occupational education.

Angelo C. Gillie

Introduction: Pennsylvania Post-Secondary Occupational Education: 1969

Angelo C. Gillie, Associate Professor
Department of Vocational Education
The Pennsylvania State University

An Overview:

Pennsylvania is the third most populous state with an estimated 12 million people (1970 projection). In spite of its present size, it has been experiencing a population growth rate that is considerably lower than that of the entire country since 1910. Its estimated 1970 population represents an increase of just under 6 percent since 1960, while during this same interval of time the nation is expected to have a population increase of 16.1 percent. The projections into 1980 indicate a continuation of this trend. This slowing growth trend is also reflected in the percent increase in employment. In 1940-50, the state ranked 29th in employment growth rate and then fell in rank to 40th during the 1950-60 decade. Also noteworthy, because of its long term effect on the state's ability to support education, is the per capita personal income. In 1966, this figure was below the per capita personal income of the surrounding states of New York, New Jersey, Ohio, and Maryland. One bright element in the overall picture is that the annual unemployment rate in Pennsylvania has been below the national rate since 1965.

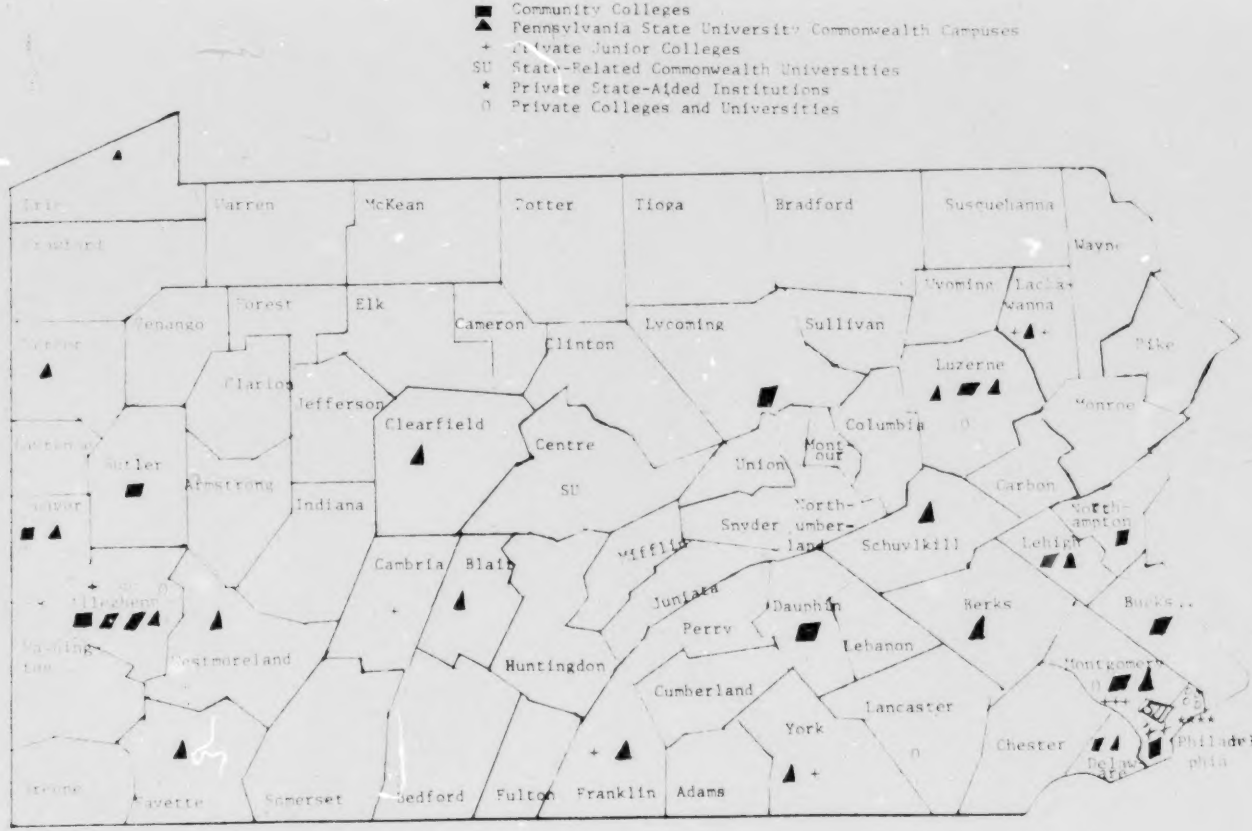
There are nine major vehicles for the provision of occupational education in the state at this time. They are listed in Table 1, along with the number of 1967 graduates.

Institution Type	Nr. of 1967 Occr. Prog. graduates	Percentage of the total
Public Secondary Schools	48,391	63.8
Community Colleges	953	1.3
Private Trade and Technical Schools	6,035	7.8
State Trade and Technical Schools	8,549	11.3
MDTA	4,284	5.7
State Retraining Act	4,009	5.3
2 yr. Programs in Senior Colleges and Universities	1,864	2.5
Independent Junior Colleges	1,212	1.5
TOTAL	75,297	99.2*

Occupational Education Graduates of 1967
by Type of Institution

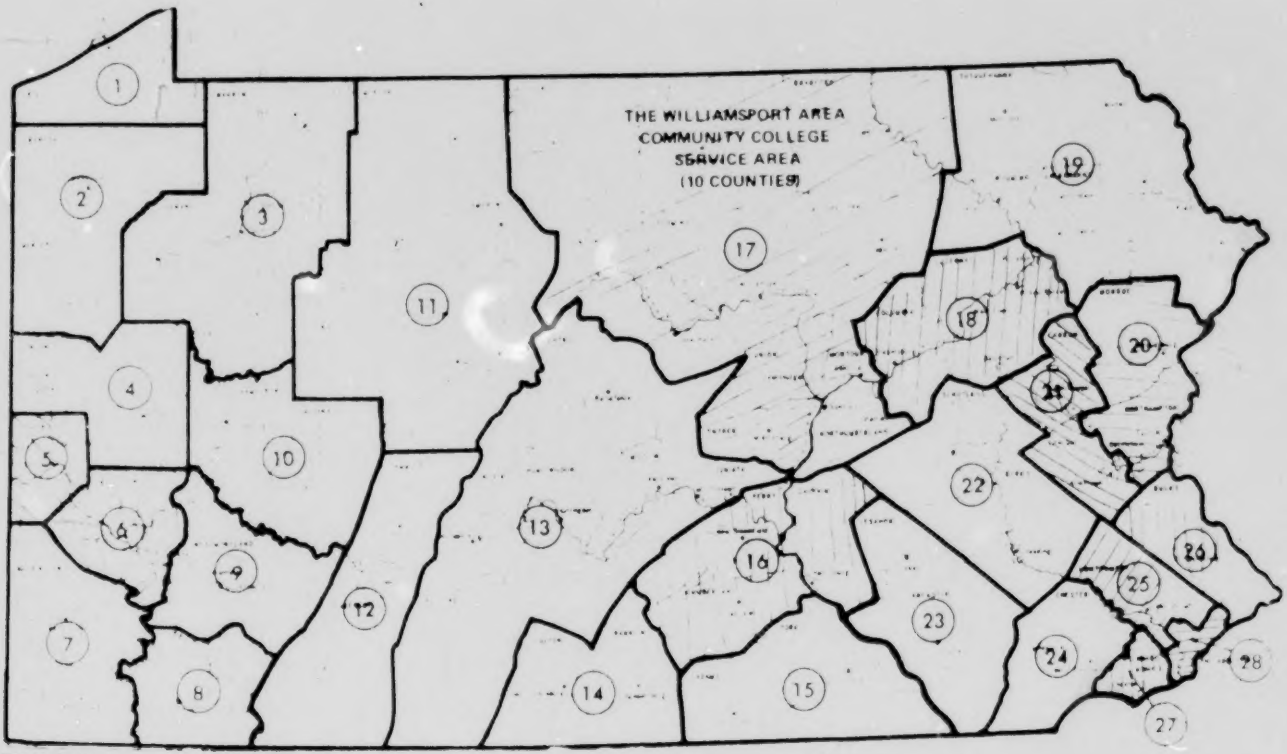
* Doesn't total to 100% because of rounding.

Table 1



Institutions offering Programs in
Post-Secondary Occupational Education

Figure 1



Community College Service Areas
(Shaded regions now have colleges)
Figure 2

Table 1 shows that the major effort in occupational education in 1967 was in the secondary schools. It will probably take several years for the community colleges to make a sizable impact on Occupational Education in Pennsylvania. The community colleges received their original impetus in 1963 when the General Assembly passed P.L.1132, which authorized the State Board of Education to develop a state-wide system of community colleges - technical institutes. Since that time, twelve* community colleges have appeared on the scene (see Fig. 1 for their locations). It is reasonable to expect that they may well become a major, if not the predominant, institution for the provision of post-secondary occupational education for the state. This is indicated by the enrollment figures for 1968, which are presented and interpreted in a later paragraph.

The Commonwealth Campuses of The Pennsylvania State University are the major source of post-secondary occupational program graduates in the "2 yr. programs in senior colleges and universities" category. One of the most controversial issues in post-secondary occupational education in the state has been the co-existence of these campuses and the community colleges. Several state-wide studies recently conducted have pointed to the problem (1,2).

Higher Education Enrollments:

The state had 168,000 high school graduates in 1967, and 54% (91,000) of them went on for additional formal education. Of this number, 41% (68,000) enrolled in colleges and universities, while the remaining 13% (22,000) enrolled in business, nursing, trades and other schools. A ten year projection (3:12) show the following for 1977:

High School Graduates:	194,400	
Continue with formal education:	130,200	(67%)
College and University enrollment:	104,200	(54%)
Business, nursing, trades and other schools:	26,000	(13%)

* The Community College of Allegheny County has three campuses, each with its own President, and each can be called a community college in the Allegheny County System. Therefore, it would be more accurate to state there are 14 community colleges.

Let us next turn to the recent Associate Degree output of the state and compare it to the 1978 projections (3:12):

Type of Institution	1967	1978
Community Colleges	891	10,100
Private Junior Colleges	2,273	2,500
State related Commonwealth Campuses	1,006	2,100
State aided Private Institutions	106	300
Private colleges and Universities	450	900
TOTALS	4,726	15,900

ASSOCIATE DEGREES, 1967 and 1978

Table 1

It is of some interest to examine the modest role projected for the state's community colleges. While some community college authorities have stated that half of the college population will be in the community colleges (nationally) in the 1970's (4.7), the projections quoted here show that the community colleges may not serve such a large role in Pennsylvania. This is indicated by the projection of many more bachelor degrees than associate degrees for every year right up to 1978 (which is the last projected year). For example: 62,000 bachelor degrees are projected for 1978 while only 15,900 associate degrees are projected for that same year. This observation leads one to conclude that the great majority of college students are expected to enroll directly in a senior college or university. If this continues to be true, then the community college will not be the most popular post-secondary institution in Pennsylvania.

It is heartening to observe that recent enrollments cause one to suspect that the community college projections mentioned above may be too modest. The Fall 1968 figures show a total community college enrollment of 30,676 students (5)*. If only 30 per cent of these students successfully complete their course in two years, the community colleges will award 9,200 associate degrees in June, 1970. This is almost three times greater than the projection of that year (3,100). If this rate of growth should continue, the community colleges will end up playing a much more significant role in Pennsylvania higher education than indicated from the official projections cited in this paper.

* This figure increased to an estimated 36,812 for Fall of 1969, of which full time students = 23,950, part-time = 12,860, and F.T.E. = 27,624. The F.T.E. for occupational programs = 12,790. These data were provided by the Bureau of Community Colleges on October 15, 1969.

The Pennsylvania State University Commonwealth Campuses:

The Commonwealth campuses of the Pennsylvania State University offer the first two years of transfer type courses and two year occupational programs. The associate degree is conferred upon the occupational baccalaureate programs graduates only, since the transfer students are considered candidates from the time they enroll. The scope of the associate degree program is indicated in the Bulletin (6:4):

> At present the University offers the two year majors in Agricultural Business, Business, Chemical Engineering Technology, Forest Technology, Hotel and Food Service, Letters, Arts and Sciences, Materials Technology, Retailing, and four areas of engineering: Drafting and Design Technology, Electrical and Electronics Technology, Manufacturing Technology, and Surveying Technology.... ....Most of Penn State's associate degree enrollment at present is concentrated in its engineering technology majors.

Table 2 lists the curriculums and the number of Commonwealth campuses in which they are offered (6:41). There are nineteen campuses plus the main campus at University Park.*

Curriculum	Number of Campus
Baccalaureate Majors	17
Agricultural Business	4
Business	11
Chemical Engineering Technology	3
Drafting and Design Technology	18
Electrical and Electronics Technology	17
Forest Technology	1
Hotel and Food Service	1
Letters, Arts and Sciences	5
Manufacturing Technology (1st year)	17
Manufacturing Technology (1st and 2nd year)	1
Materials Technology	1
Retailing	1
Surveying Technology	2

Commonwealth Campus Offerings

Table 2

* See Figure 1 for the location of the Commonwealth Campuses.

As indicated by the admissions requirements specified in the Bulletin, the commonwealth campuses are not open-door type institutions in the way that many community colleges are. This perhaps accounts, at least partially, for the consistent small enrollments. For example: 2,985 students were enrolled in 1967, and there were 688 graduates in that same year. Considering the number of campuses, this is indeed a small number of associate degree students (it averages out to about 40 per campus in 1967). The two programs with the greatest enrollment are Drafting and Design Technology (which has had 3,567 graduates since 1955) and Electrical and Electronics Technology (with 3,177 graduates since 1955).

The retention rate for all associate degree candidates has been about 50 per cent. Of interest is that about 24 per cent of the associate degree graduates during 1964-67 were employed in the same locality in which they attended college, and another 22 per cent were placed in other regions in Pennsylvania (2:24). Very few females are enrolled in the associate degree programs, as is the case with engineering related curriculums throughout the country. In 1967, only 80 out of the 1,032 women enrolled at the commonwealth campuses as freshmen were in associate degree programs.

All entering freshmen are required to take the SAT: therefore, comparisons can be easily made. A total of 1,681 males were enrolled as freshmen in associate degree programs in 1967 and their mean total SAT was 910, as compared to a mean total SAT of 1,090 for the 4,169 baccalaureate degree candidates of the entire university. A similar examination for the female students shows that the mean total SAT for the associate degree candidates was 892 as compared to a mean total SAT of 1,061 for the baccalaureate degree aspirants (7:32-34).

The Capitol Campus of the university, which is located just outside of Harrisburg, offers three baccalaureate programs for certain occupational curriculums. These programs, somewhat innovative in nature, are:

1. Electrical Design Engineering Technology
2. Mechanical Design Engineering Technology
3. Water Resources Engineering Technology

All three programs lead to the Bachelor of Technology degree. The inputs to them are obtained from associate degree graduates of community and junior colleges and the Penn State Commonwealth Campuses. These offerings are relatively new, first offered in September 1967 and following are the available enrollment and graduation figures:

Enrollments: Electrical Design - 41 (1967) - 102 (1968)
Mechanical Design - 39 (1967) - 89 (1968)
Water Resources - 9 (1967) - 28 (1968).

The first graduation class (1969) had 34 Electrical Design graduates, 21 in Mechanical Design, and 5 in Water Resources.

The Community Colleges (8):

The possibility of the community colleges becoming major centers for post-secondary occupational programs is well demonstrated in the recent enrollment figures. In December of 1968, the total enrollment was just under 31,000. It should be mentioned that this falls a bit above the projection of minimum enrollments made by the Field Study — (1:45), which estimated a total enrollment of 28,300 for fall, 1968. Just under 13,000 of the actual total enrollment were in occupational programs. Expressing this in another way, 42 per cent of the entire December 1968 enrollment was in occupational programs. Other calculations show that the Mean College Enrollment was 2,215, with a Mean Occupational Program enrollment of 929 and Mean Transfer Program enrollment of 1286.

We can show that the Pennsylvania community colleges do compare favorably with other states in terms of percentage of enrollment in occupational curriculums. California, long a forerunner in the community college movement, recently had 40 per cent of all their community college graduates as declared majors in occupational programs (9). The Hawaiian Community College System, because all but one of its community colleges were originally post-secondary technical schools, had 70 per cent of its fall 1968 enrollment in occupational programs (10) and has one of the highest occupational program enrollment - total enrollment ratio in the nation. Therefore, it is seen that Pennsylvania does display a favorable occupational program enrollment - total enrollment ratio.

The community colleges, as young as they are in Pennsylvania, already display great diversity in programs and in types of institutions. At one end of the spectrum is the Williamsport Area Community College, which also serves as the Area Vocational School for its service area. It has more than 45 occupational programs with 76 per cent of its enrollment in these curriculums. Community College of Beaver County, although having a smaller total enrollment and not serving as an Area Vocational School, offers 11 occupational curriculums in which 79 per cent of their students are enrolled. The other end of the spectrum finds one community college with 25 per cent of its students enrolled in occupational curriculums.* The colleges are also diverse in terms of locations, ranging from rural to suburban to urban.

It is interesting to note that the State Board of Education has developed a community college service area boundary plan to be used as a guide by potential community college sponsors. These are shown in Figure 2, and the service areas which now have community colleges are cross-hatched. The twelve service areas already approved contain about 64 per cent of the commonwealth's population. Using the estimates for 1970, this would be about 7.68 million persons.

* These figures are based on December 1968 data as obtained from Reference number 5.

The 1968 total enrollment of 31,000 represents only 0.4 of one per cent of the 7.68 million population - which is very much below the 1.05 per cent found in California (11:36). If Pennsylvania were to develop community colleges in all of the service areas designated by the State Board of Education and maintained this present rate of enrollment, the total community college student body would only be 48,000. On the other hand, if they were to increase their enrollment rate to that found in California, the existing districts would have about 81,000 students. Furthermore, if the entire state were served by community colleges, that enrollment rate (1.05 percent) would result in a total of 126,000 students. Comparing the 1968 totals to this last figure, it can be said that the community college movement in Pennsylvania is at about 24 per cent of its ideal potential.

Continuing Education:

A recent study by the Pennsylvania State University in cooperation with the Bureau of Vocational, Technical and Continuing Education of the Department of Education and the Pennsylvania Association for Adult Education reveals the present status of continuing education. The study points out those institutions that offered continuing education activities by program categories (12:3). Those of interest to us here are as follows:

Program Category	No. of Institutions	No. of Registrations
Associate Degree Credit	12	9,558
Non-Degree Credit	22	23,264
Non-Credit	41	55,341
Conferences-Workshops-Seminars	60	86,643
	TOTALS	174,806

Of the totals, about 3,600 registrations were in Junior Colleges and 11,000 in the community colleges. The majority of the courses and registrations were in occupational programs related to business, engineering, and health professions. Only one of the community colleges did not offer continuing education activities (12:25).

The Junior Colleges:*

The private junior colleges graduated 1,212 occupational program students in 1967 (13:185). About 85 per cent of these were in the managerial and clerical type programs while 15 percent were in the technician area. This figure increased from just over 1,200 in 1967 to 1,760 occupational program graduates in 1968 (14:33-39). It is believed that the private junior colleges will not produce a great proportion of occupational program graduates in the years ahead.

* In Pennsylvania, the private two-year colleges are called Junior Colleges.

Other Occupational Education Training Institutions:

About twenty-eight percent of all the occupational program graduates in 1967 were from the institutions in this category. Lumped in category, along with the number of 1967 graduates, are the following:

Institution Type	1967 No. of Graduates
Private Trade and Technical Schools	6,035
Private Business Schools	8,549
State Trade and Technical Schools	645
MDTA	4,284
State Retraining Act	4,009
Totals	23,522

It is difficult to clearly ascertain which of the above are secondary programs and which are post-secondary. The viewpoint adopted here is that occupational programs for people beyond the usual high school age should be considered post-secondary curriculums (i.e. the age of the student body determines whether a program is secondary or post-secondary and the academic level of the curriculum is not a determining factor).

The Area Vocational-Technical Schools:

The recently released Arnold Report had some interesting comments about the area vocational-technical schools (13:71):

> The purpose of the area vocational-technical school is to make occupational education programs available to all secondary school pupils, out-of-school youth and adults of the Commonwealth by the establishment of programs to serve a number of secondary schools in a given geographical area known as attendance areas.

In June of 1968, there were 40 AVTS in operation. A total of 52 AVTS are either in operation or approved. These institutions have a potential enrollment of 50,000 students with an average of 22 programs in each AVTS. This breaks down to a mean AVTS enrollment of just under 1,000 students. Eventually, there may be as many as 67 AVTS in the Commonwealth.

Arnold disagrees with the contention of those occupational educators who say that AVTS is a separate school system. This is a serious point of contention with community college people, and it should be: Area vocational-technical schools have been established at a national rate of 250 per year for the past four years. The development of this new kind of institution in such great numbers will inevitably affect the community colleges on a national scale within the next few years.

Conclusions:

One might gather the impression that Pennsylvania post-secondary occupational education has been pretty much of a hodge-podge in the past. To a great extent, this is true, at least in that there has been relatively little state-wide planning until recently. The first real efforts toward developing a master plan for education came about after the new State Board of Education was legislated into existence in 1963. This new board commissioned a number of studies that examined the role of the state colleges, the community colleges, and vocational education. These studies, along with a number of other deliberations, served as an integral part in the process of preparing a Master Plan for Higher Education.

The present Master Plan envisions higher education as being in three segments, i.e. community colleges, state-owned institutions, and Commonwealth universities. Furthermore, as stated by Bender (15):

> The Master Plan called for coordinating councils to be formed among the 3 segments within the Commonwealth system and a Liason Committee between the private institutions and the State Board of Education.

At this time, the Master Plan is being reviewed in depth, and this will probably have a substantial impact on the future of post-secondary occupational education in the state. Bender said (15):

> ...we have organized 7 Task Forces which are conducting investigations into specific issues. These include: Philosophy and Governance of the Commonwealth System; Branch Campuses; Junior Colleges and Community Colleges - Present and Future; Private Higher Education; Mission Coordination and Accountability; Programs to Equalize Higher Education Opportunity; and Continuing Education.

This review is scheduled to be completed by 1970. It is hoped that it will provide a vehicle by which some of the constraints presently imposed upon the overall community college movement will be reduced or removed. Furthermore, the new Master Plan might very well be the agent by which the diverse post-secondary occupational education efforts can be placed in an overall state-wide framework that will result in the greatest good for the Commonwealth and its people. It is felt by many that the present planning can have a substantial impact on the availability and the quality of post-secondary occupational education in the years ahead. The step between planning and implementation, which is financing, is perhaps the most crucial point of all. Time will tell whether the funds needed to put the plan to work will be forthcoming.

References:

1. Fields, Ralph R. and Associates. Community Colleges in Pennsylvania. A report presented to the State Board of Education on June 30, 1965, Harrisburg, Pa.

2. Heald, Hobson and Associates. Off-Campus Centers in Pennsylvania. A report presented to the State Board of Education on April 15, 1968, Harrisburg, Pa.

3. Bureau of Labor Statistics, Pennsylvania Department of Public Instruction. Projections of Selected Educational Statistics for Pennsylvania to 1977-78. Harrisburg: Commonwealth of Pennsylvania, August 1968.

4. Woodman, Everett M. "Our Message and Our Mandate." Junior College Journal (Volume 40, September 1968, Number 1). Washington: The American Association of Junior Colleges, 1968.

5. Sheppard, Robert L. (Editor). Directory Listing Curriculums That are Offered in the Community Colleges of Pennsylvania. Harrisburg: Bureau of Community Colleges, February, 1969.

6. The Pennsylvania State University Bulletin: Associate Degree Programs. 1969-70.

7. Lindsay, Carl A.; Hoover, Theodora; Kepler, Betsy. 1967 Fall Term Pennsylvania State University Freshman Class: Profile of Intellective Variables. University Park, Pennsylvania: The Pennsylvania State University Office of Student Affairs, June 1968.

8. The 14 Community Colleges and their Presidents are as follows: Bucks County Community College (Charles E. Rollins); Butler County Community College (James D. Lawson); Community College of Allegheny County (Kermit C. Morrissey); Allegheny Campus (Herbert Sussman), Boyce Campus (Benjamin G. Davis), South Campus (LeRoy W. de Marrais); Community College of Beaver County (John B. Hirt); Community College of Delaware County (Douglas Libby); Community College of Philadelphia (Allen T. Bonnell); Harrisburg Area Community College (Clyde E. Blocker); Lehigh County Community College (John G. Berrier); Luzerne County Community College (Guy V. Ferrell); Montgomery County Community College (LeRoy R. Brendlinger); Northampton County Area Community College (Richard C. Richardson); Williamsport Area Community College (Kenneth E. Carl).

9. The figures were given to this writer by Dr. Sidney W. Brossman, Chancellor, California Community Colleges, in a letter dated August 14, 1969 and represented data for 1967-68.

10. These figures are based on University of Hawaii statistical data on the community colleges in that state.

11. Gillie, Angelo C. "New Jersey Community Colleges: A Report and Prognosis." Junior College Journal (Vo. 36, Nov. 1967, Nr. 3) Washington: American Association of Junior Colleges, 1967.

12. Inventory of Continuing Education Activities in Pennsylvania Institutions of Higher Learning. University Park: The Pennsylvania State University, 1969.

13. Arnold, Walter M. Vocational Technical and Continuing Education in Pennsylvania. Harrisburg: Department of Public Instruction, 1969.

14. Bureau of Statistics, Our Colleges and Universities Today. Harrisburg: Department of Public Instruction, 1969.

15. Bender, Louis W. "Post-Secondary Occupational Education and the Pennsylvania Master Plan for Higher Education". A paper delivered at the "Pennsylvania Conference on Post-Secondary Occupational Education", The Pennsylvania State University, October 7, 1969.

Occupational Education in Community Colleges Today and in 1980

Lewis R. Fibel, Executive Director
Maryland State Board for Community Colleges

It is a pleasure for me to be here today. This subject is one to which I have devoted much thought. I can offer as objective qualifications the fact that I have been working in this field for more than twenty years, and particularly because of my most recent experience with the American Association of Junior Colleges which demolished some of my parochial prejudices and gave me an insight into the national situation.

I've been asked to "tell it like it is". This is extremely difficult. No one knows it like it is; only as he sees it. Occupational education in the community college, perhaps all education, suffers from a lack of systematic data collection and inconcise analysis. There are few good sources to which to turn. What I shall say, then, is gathered from personal observation, not particularly scientific, and reflects many personal prejudices. I shall not repeatedly intrude into my remarks, "I think", "I believe", "in my opinion"; you can insert them appropriately.

I shall use the term "occupational education" generically to include any educational activity that includes job preparation as one of its objectives. Thus, I wish to subsume, "vocational education", "technical education", and any other derivative terms under the general one.

Consideration of occupational education in the community college must derive from the broader concept of the role of the community college. The ultimate rationale for the existence of the community college is to extend educational opportunities. This is fundamental - so fundamental, in fact, that I would advise a non-believer to look elsewhere for a job.

Educational opportunity can be extended by making it more accessible in terms of geography, finance, admission policy, and program.

The principle of geographic accessibility is to provide a college facility within commuting distance, roughly one hour travel time, or to make appropriate arrangements for student housing. This, obviously, has implications related to specific programs, and I shall return to that later.

The development of state plans and state systems of community colleges has been a big factor in increasing geographic accessibility. Noteworthy accomplishments have been achieved in Florida, California, and New York. This is one of the legal mandates to the new State Board for Community Colleges in Maryland. Many other states are also working constructively toward this goal.

The principle of financial accessibility provides that the opportunity for a college education shall not be precluded due to a lack of sufficient funds on the part of the individual. New York City by providing tuition-free instruction at the community colleges certainly recognizes the principle. I'm not convinced, however, that omission of tuition is universally desirable. In any case, many of you will appreciate that frequently it is insufficient. The cost of fees, books, lunches, and car fare may prove to be a financial barrier to many. Further, if the state decides to encourage the location of some more unusual occupational programs at selected colleges, the need of subsidy for housing and board can become significant. Finally, the financial support to the family, lost if the child elects college rather than working, must also be considered.

Having a system of community colleges within commuting distance of every student in the state, and supported by a sound student financial assistance program, would indeed measurably extend opportunity for educational experiences. However, it would not be sufficient reason for the establishment of community colleges, per se, unless accompanied by a liberal admission policy. The principle here is that the community college should admit all students who could profit by the instruction offered. Unless the community college is admitting students who would not be admissable to other public colleges, it fails to perform a unique role. This does not preclude also admitting students who would be eligible for admission to four-year colleges, but does suggest an additional, supplemental function for the community college.

The liberal admission policy, often called "open-door admission" is frequently misunderstood. It does not mean that any student shall be admitted to any curriculum or to any course. It does not mean the right to fail. On the contrary, the college, the city, and the state have the right to restrict admissions only to programs where the student has a reasonable chance of success, and the responsibility to see that there is provided a comprehensive counseling program to accomplish this.

Lastly, all of the previous factors would still accomplish relatively little, if a broad spectrum of programs compatible with the interests, achievements, and aptitudes of these additional students were not offered. The list of programs that thus might be offered by a community college is a long one, and no individual college can or should offer all of them. From the list, each college can choose those programs for which it has special competencies, bearing in mind, the contributions of other institutions in the community. It should be stressed that a community college has no privilege of monopoly in any of these areas. All of the functions are carried out by others, and there should ensue a healthy competition to determine which will ultimately operate most effectively and economically.

A community college may offer a transfer program providing the first two years of study in the liberal arts and sciences or in pre-professional work. The graduate of this program should be qualified to transfer to a

four-year college to complete the requirements for a baccalaureate degree. The majority, but not all, of students enrolled in community college transfer programs will not have demonstrated the abilities requisite for admission as freshmen to four-year colleges, therefore, it devolves upon the community college to devise alternate and innovative strategies of instruction to reach these students.

A community college may offer a remedial or developmental program to provide opportunity for a student to qualify for admission to the transfer program. This narrow approach has not been demonstrably very successful; a broader approach is preferable.

A community college may offer a general studies program intended neither for transfer nor to meet specific vocational goals. However, most students that enroll in this program have latent ambitions, and become disappointed when they ultimately learn of the restrictions inherent in this program.

A community college may offer a spectrum of occupational programs. These will offer entry into variety of jobs, differing in the kind and amount of necessary preliminary training. However, each program will meet all of the following objectives: (1) the graduate will be prepared for employment in the field for which he has been trained with only a minimum of additional on-the-job experience; (2) the graduate will have had the education to be potentially both horizontally and vertically mobile, and to be adaptable to technological change within his field of employment; and (3) the graduate will have had education to enable him to cope more successfully with his personal and civic problems. I will discuss other aspects of occupational education more fully later.

A community college may offer a remedial or developmental program to provide opportunity for a student to qualify for admission to an occupational program. This is best done when coordinated with the remedial program for transfer, and when coupled with extensive vocational guidance and information.

A community college may offer adult education or community services. This may comprise courses, symposia, lectures, exhibits, art shows, music, or drama, or may take still other forms. It may parallel the work of the "regular" sessions or may be different. It may be offered in any place and at any time. It may contribute to the vocational, avocational, or cultural interests of the students. It may exist for its own sake or may provide a bridge to other programs of the college.

Thus by being geographically and financially accessible, by having a liberal admission policy, and by offering a variety of programs, the community college can be an important instrument in the extension of educational opportunity. Further, occupational education is perhaps the single most significant and distinctive facet of this package.

With this as background, let me now turn more extensively to a discussion of occupational education in the community college. Some differentiation can be made within the field on the basis of the level of the position for which training is supplied. A higher level position usually implies more sophistication of knowledges and skills to be imparted, and concurrently generally requires a longer period of formal education. The level of education most commonly offered in the community college is that identified as producing technicians or middle manpower. Definitions of the level serve no particularly useful purpose. Those of you with teaching experience at Pennsylvania community colleges readily identify the level with that of the Associate-degree programs of that institution. If you should journey to California, you would find some differences in the understanding of the term. In concept, in any event, we are dealing with positions that are intermediate between professionals and craftsmen. This is the predominant type of occupational education in the community college, and in addition, the community college is rapidly becoming the predominant type of institution to offer this type of training. It is on this field that I shall focus in the main.

Parenthetically, however, it should be said that increasingly community colleges are concerning themselves to a greater extent with programs to prepare people for lower level positions as skilled and sometimes semi-skilled personnel. It's common for a value to be placed on the term "level", and for "lower-level" to be equated with "non-collegiate". I can't see that the argument has much merit. More pertinent, I believe, is the fact that community colleges have not been particularly successful in this type of training.

The variety of middle manpower occupational programs in community colleges is very large. American Junior Colleges lists in the appendix over 100 major kinds, and, each month, in the Occupational Education Bulletin*, there are reports from colleges of new ones to be added to the list.

It may be informative to give some idea of the range of programs, including the mention of some that are either relatively new or relatively scarce. The State of Pennsylvania probably offers as great a variety as any state; many will be familiar to you.

In the industrial field, the technologies related respectively to civil, mechanical, and electrical engineering remain the workhorses. Electromechanical technology is a noteworthy addition. Laboratory oriented programs in chemistry are long standing, but ones in physics and biology are newer.

---

* Published by the American Association of Junior Colleges (Washington) as a part of their project to assist in the development of occupational education in the two-year colleges. (Editor's note)

There are also emerging programs geared to a specific industry, e.g., aviation or automotive, and a group of exotics such as numerical control, oceanography, and nuclear power technology.

In the health field, there has been wide acceptance for programs to train nurses and the various dental auxiliaries, less so for medical laboratory or X-ray technicians. Significantly, however, there are over 40 other distinguishable programs in the health field including ones to prepare surgery technicians, medical emergency personnel, ward managers, inhalation therapy assistants, and biomedical electronic technicians.

In the business field, there are many programs in accounting, marketing, and secretarial areas. Most note worthy, however, is the rapid growth of programs in data processing and computers. Also evident are specialized programs for banking, insurance, and real estate interests.

The idea of this sort of training for public service is, in its entirety, relatively new, although, by this time, there have been enough programs established in the police field for it be commonplace. Programs are beginning to develop in fire science, corrections, traffic safety, urban planning, and others.

Add to these four general areas a scattering of programs in agriculture and the applied arts, and there are few occupations that are not affected.

The basic need for technicians has risen from changes taking place in our society. Some of these have been identified by Norman Harris of the University of Michigan:

- the increasing complexity of everyday life in an urban, industrialized society.

- the implosion of technical and scientific knowledge which has characterized the past four decades,

- the alarming increase in sophistication and complexity of occupations at all levels,

- the fact that in our society education stands between man and his job - that lack of education is a barrier between men and job.,

- the virtual disappearance of unskilled (common labor) jobs,

- the impact of automation and the flow process industries on production, on jobs, and on people,

- the action and reaction in a free society which leaves no person content to "stay in his place",

- the realization that knowledge is the key to a better life - not just for the few, but for the many,

- an awareness of the fact that if "only the educated are free", then all the free must be educated to a maximum of their capabilities,

- a manpower shortage in professional categories,

- the realization that a "disaster gap" is opening up between those of our citizens with advanced education and those with little education, and

- the urgent need for millions who can both think and do - and the gradual disappearance of a bi-polar society in which an elite few did all the thinking and the rest did all the work.

From factors such as these, technician manpower has emerged as the single fastest growing segment of our labor force; and all predictions are for a continuing of the growth. Establishment of a specific occupational program, however, requires more substantiation than such broad generalities. Documentation of quantitative and qualitative needs by national and local survey is a key first step. The New York State study of technical manpower* conducted a few years ago in which many of the faculty of the community colleges participated was a milestone both in its methodology and in its results.

Community college occupational curriculums are distressingly similar in pattern wherever they are found, although I will mention some innovative approaches later. Reason would suggest curriculums with a great deal of flexibility, in part to take into account individual differences in learning rates and learning styles, but also to make provision for future horizontal and vertical mobility for graduates. This seldom seems the case. The efforts of professional groups, accrediting associations, state agencies, and, significantly, of the faculty, itself, tend in the direction of rigidly prescribed courses, sequences, and requirements.

The development of four year technologies, regardless of their merit, or lack of it as occupational preparation, seems another potential "standardizing" influence.

One of the most progressive influences recently unleashed on occupational education has been that of the scientific fraternity. The American Association for the Advancement of Science and several of the National Science Foundation - supported commissions have recently "discovered" the

* The State Education Department and State University of New York: Technical Manpower in New York State, New York: New York State Department of Labor, Dec. 1964 (Editor's note)

two-year college and, in particular, technical education. Substantial activities are underway, especially in physics and in mathematics, to use the resources of the university in support of community college occupational education.

Colleges would be a great place to work if it weren't for the students. Occupational programs would be highly successful if it weren't for the students. The Vocational Education Amendments of 1968 were passed by the Congress without a dissenting vote. Occupational education is great for someone else's children.

With few exceptions, occupational programs have not been note worthy in their success in attracting students or in retaining them. The students don't fit the programs; the programs don't fit the students. Present programs are failing to meet the needs of significant groups of potential students. There has been little success, although I know of attempts currently underway in some cities, to provide a smooth flow for vocational high school students into and thru occupational programs in the community college.

One problem that has been particularly severe is the lack of interest, and, hence of success of occupational students in general education courses. I yield to no one in my conviction that the community college has an obligation to make a contribution to the general education of each student. I will not accept, however, that the only way to accomplish that objective is by a set prescription of standard liberal arts courses.

Most classroom instruction in occupational programs follows fairly closely the pattern of the informal lecture. Although there has been substantial development of good audio-visual supplements, and some development of programmed materials, there is comparatively little good use of these materials, and almost no use of individualized instructional methods. One drawback is the lack of a good communication channel for the publication of effective methods.

Reports have it that there is a dire shortage of qualified faculty for occupational programs. This likely is so, in part, particularly in some of the more esoteric fields. This is probably re-inforced when selection or promotion criteria are heavily weighted in favor of advanced degrees. The alternatives are seldom well received. We are hesitant or incapable of defining and measuring good teaching, and reluctant to reward it.

The probability of finding well-equipped laboratories and shops for occupational education in community colleges is much greater now than it was twenty years ago. Every community college in Iowa has at least one spectromagneto oscillomanometer. Now that I'm watching the public purse, I'm not sure this is all good. I wonder if we might not get more mileage from industry-education equipment sharing plans.

BEST COPY AVAILABLE

I guess that brings us to money. We're immeasurably better off now in every way, financially, than we were when I started in New York. Occupational education does at least as well as the academic portion of the community college. In some states, the community colleges get the short end of the stick vis-a-vis the high schools in receipt of Federal vocational funds. However, I hear loud and clear that state and local money for education is going to get tight, and, simultaneously, there is going to be a big demand for accountability.

Some occupational education faculty are almost paranoic with the fear that the only opportunity they will ever have to impart their wisdom to the students is in that brief two year period of college. This is, of course, nonsense. There is reasonable evidence to anticipate that technically-trained students will have to renew and update their knowledge periodically, usually via formal instruction. Offering updating courses for their own technical graduates provides colleges the opportunity to simultaneously offer varied upgrading and re-training courses for other technicians. Many community colleges are establishing successful activities of this sort.

One of the problems that technical faculty face is their own periodic re-vitalization. It's very easy to lie in a comfortable rut and never learn what's going on out in that great big world. There are now, however, a number of publications and other services, emanating from the Government, trade and professional associations, the universities, and other agencies that provide resources for the tired and sometimes frustrated teacher. The Occupational Education Project of the American Association of Junior Colleges has done a fine job by providing news of occupational education in its Bulletin*, identifying and orienting consultants in workshops, publishing curriculum guides and other pertinent materials, and conducting regional conferences. Much of this activity is readily available to the interested instructor.**

The most common organizational pattern for the administration of occupational education in the community college is that of a separate division, headed by a Dean. The division may have subdivisions or departments. This pattern is sometimes dictated by the requirements of a state vocational education agency in order that the institution might be eligible for Federal funds.

A superior pattern exists in a few institutions where all instruction is grouped into discipline-based divisions (e.g., engineering and related technologies; business administration and related occupational

---

* Occupation Education Bulletin (Editor's note)

** Kenneth G. Skaggs is Coordinator of the AAJC Occupational Education Project. His office is at AAJC, 1315 Sixteenth St., N.W., Washington, D.C. 20036. (Editor's note)

programs.) The division is responsible for all instruction: transfer, occupational, continuing education. With good leadership, this structure precludes splitting of the college into segments and can provide a good balance of programs among the areas.

Probably the crucial problem in occupational education is that of evaluation. There are many uses of accrediting procedures, advisory committees, and follow-up studies. Most are superficial; some dishonest. Both because of external pressure to which I have alluded, and hopefully also by internal pressure, there is a need to know what learning takes place; how it is influenced by changes in the curriculum, method, and instructor, what it costs; and what it is worth. There is little evidence that there is much serious study along these lines.

I have tried to touch briefly on several aspects of occupational education in the community college as it exists today. You have been served a thin layer of facts heavily coated with the flour of my opinions. Finally, I would like to suggest, for at least some of these aspects, what may happen in the next decade, and what occupational education in the community college will look like by 1980. The main assumption is that there will be no catastrophe in our economic, political, or social life.

Community colleges will continue to grow in number in the next decade at approximately the same rate as in the past five years - i.e., there will be a net increase of approximately fifty new institutions per year. Thus, the present 1000 institutions will become 1500 by 1980; virtually all the growth will be in the public sector. After 1980, the rate of growth of new institutions should decrease.

The organizational pattern will be predominantly, at a local level, the independent college district, and remaining ties with K-12 systems will dissolve. In populous counties, there will be multiple campuses with a central administration and board. The New York City pattern of operation within a university will not be duplicated in many places, and may be altered there.

State plans and state systems for two-year colleges will become extensive. State bureaucracies will grow. An increasing share of financial support will come from the state, and with the support will come more control. Federal funding will also increase, but more likely in categorized rather than in general support. This will also result in more control.

Faculty and student militancy will act as counter-influences to any centralization of decision-making. The lot of a college president will continue not to be a very happy one.

Enrollments in community colleges will continue to grow, a conservative estimate is a net growth of 10% per year, resulting in a doubling of two-year college enrollments by the end of the decade. The

growth will result largely from an increased proportion of the population attending college, and simultaneously will result in a larger proportion of those students in institutions of higher education, attending community colleges.

Enrollment will increase in all community college programs but the sharpest growth will take place in occupational programs. At the same time, continuing education will increase substantially.

The development of baccalaureate programs in the technologies and curriculum and career ladders associated with many occupations will tend to blur the lines of distinction between occupational and transfer curriculums; students will not be rigidly thus categorized.

Most of the present technician level occupations will continue to grow, and at a substantially higher rate than for other occupational groups. There will be need for more nurses, secretaries, policemen, electronic technicians, computer programmers, and the like. Many of the emergent middle manpower occupations will become well-established, particularly in the fields of business and public service. New occupations, for which there is no formal training today will often look to the community college as a manpower source.

Many curriculum concepts that have been talked about for years, and that have had only meager implementation, will become important. Curriculum and career ladders will develop in most occupational fields. A pattern of attendance involving successive periods of study and work will be common. The individual will attend college for a year or two, and be prepared then to work for three to five years; he will then return to formal schooling for another year or two, followed by another work period at a higher level of responsibility. This may be repeated a number of additional times. However, a good bit of the latter education will be on a part time rather than a full-time basis.

An alternate route for many students will be work-study arrangements. The time periods may be a week, a month, or a semester. The work periods, however, will be closely articulated with the study; the faculty will have some control of the work experience, and will thereby establish much closer liaison with employing groups.

The proliferation of occupations and of curriculums could force students into early, perhaps premature, career decisions, and with expensive proliferation of courses, could become administrative headaches: expect that there will develop core curriculums with common first semesters or first years for a cluster of jobs that can effectively postpone the need for specific career decisions. At the same time, there will simultaneously exist in the same college, specialized, "express" curriculums for many occupations; the student will have a choice of the route.

The distinction between the general education and occupational aspects of the curriculum will lessen, and there will be substantial efforts toward an integrated curriculum incorporating both. This trend will be particularly significant in the high school, but it will affect the college.

Since the emphasis in the growth of community college education and the rationale for it is, and will be, reaching more and other students, the methods and the materials of instruction will undergo sharp examination and considerable change. Nevertheless, the conventional and current approaches will substantially continue in part. Some few institutions will establish elaborate hardware systems, but computer-assisted or computer-managed instruction will not be significant in the community college by 1980.

The change, rather, will be built upon an understanding that individuals differ in their rate and style of learning, as well as in the amount of prior learning that they have obtained. This will result in substantial tutorial approaches, the use of programmed instruction, multiple methods of instruction within a course, and the development of units of instruction as contrasted to courses. Proficiency and achievement will be measured more by examination than by course completion.

I have tried to describe for you some of the developments that I anticipate. I've tried, consiously, to avoid placing value judgments on these changes, although, I suspect that, subconsciously, my prejudices shine through.

Finally, I believe, that the real measure of what happens - the learning that takes place - will be a function of faculty-student interactions in the classroom. The success, then, is dependent upon the competency, the interest, and the enthusiasm of the individual teacher. To me, involvement in this kind of education has been continuously exciting and satisfying. I invite each of you to share in the same joys.

The Role of the Pennsylvania Community Colleges in Post-Secondary Occupational Education

Dr. Allen T. Bonnell, President
Community College of Philadelphia

In recent years a number of Commonwealth sponsored studies have focussed attention on the urgent need for a higher level of competence in Pennsylvania's manpower pool if the State is to maintain its competitive posture.

In April, 1963, Governor Scranton charged his newly appointed Council of Science and Technology "to develop and implement programs to accelerate the growth in Pennsylvania of the new science-oriented industries." One of the specific tasks of the Council was to "develop recommendations for State educational policies in the areas of scientific, technological, engineering, and related vocational education at all levels, leading to the establishment of an optimum system meeting the new industry requirements." The final report of the Council touched on the central theme of today's conference when it stated that:

> "Although the availability of highly qualified leaders in science and technology is the first priority concern for the promotion of modern industry, it is also essential that there be an adequate supply of individuals having appropriate educational preparation to participate at all levels in technical industrial enterprises...
>
> "The Commonwealth is inadequately supplied with sub-baccalaureate institutions for providing supporting personnel in scientific and technical industry. In consequence, we recommend that Pennsylvania develop a carefully planned, comprehensive, and extensive program for the training of highly competent technicians in a variety of specialities related to science-oriented industries."

It was strongly recommended by the Council's Committee on Education that the Commonwealth encourage the establishment, particularly in industrial areas, of Community Colleges with strong programs in mathematics, science, and technology.

One of the disturbing discoveries of the Education Committee was that there was a dearth of data on the supply of, need for, and the actual production of technically trained people at the technician and sub-professional level in Pennsylvania. In its Report, the Education Committee stressed the "dire need for carefully collected, accurate, and up-to-date information on the demand for and supply of sub-professional technicians."

It seems to me, after reading the 493 page Report just released by the Pennsylvania Department of Education -- "Vocational, Technical, and Continuing Education in Pennsylvania--A Systems Approach to State-Local Program Planning"--that many of the deficiencies in our information have been remedied. A further refinement should be development of data immediately pertinent to individual communities within the State.

The Community Colleges, from their vantage points in the urban, industrial centers, and by their techniques of close collaboration with the governmental, commercial, industrial, and professional enterprises and offices they serve, may be able to fill in the gaps of information about needs for paraprofessional and sub-professional personnel and help fill the gaps in the ranks of such personnel.

Forces Influencing Development of Community Colleges

The Community College is a response to new educational needs that have developed as a result of profound societal changes--changes so recent that the concept and name of this new breed of educational "cat" did not enter the professional literature until the 1940's.

The Community College is a multi-purpose institution. Yet prototypes for each of its many educational functions are to be found in a variety of institutions or in special educational functions carried on by "traditional" colleges and universities. There were many reasons for bringing all of these functions under one roof. It was partly a matter of economy, partly a matter of convenience, occasionally a matter of accident, but particularly a logical institutional response, based on sound principles of educational philosophy, to the fundamental changes that had taken place in modern society under the impact of modern science and technology. In the Community College I think we have again proven that the whole can be greater than the sum of its parts.

Within a very short span of time science-based technology has revolutionized our lives. We have already made the transition from a rural-agricultural economy to an urban-industrial economy. Our populations are concentrated in the great cities and the great cities have grown so large that Megalopolis has replaced Metropolis. Our economy is complex and the roles individuals play within it are increasingly more sophisticated and specialized. Men are separated by many steps from the fruits of their labor; the rewards of their labors are a function of the skills which they can bring to their jobs; and, increasingly, jobs are available only to those who have specific skills.

We are a changed society, but a democratic socity, still committed to the great and humane aspirations so nobly phrased in the preamble of our Constitution. In a society so committed, a full and free life and the achievement of a modicum of happiness depend increasingly on the right to access to an education through which each can become all that he is capable of being. Because of the rising cost of education beyond the high school, the times are ripe for a College which is readily

accessible geographically and financially to great numbers of people; which has the capacity because of counseling and the variety of its curricular offerings to serve a diverse clientele; which, in its dedication to people, is more concerned with transmission of available knowledge through good teaching than the discovery of new knowledge through research; which is experimental and prepared to explore new methods of instruction; and which is sufficiently free from the restraints of tradition that it can respond quickly to the changing societal needs.

Enabling legislation for a network of Community Colleges was passed by the Commonwealth in 1963. The first of the Pennsylvania Community Colleges was opened in 1964. Twelve are now in operation and one of them, Allegheny County Community College, has three campuses. Total enrollments this Fall are in excess of 33,000. The capacity for service to the Commonwealth should exceed 100,000 by the end of the next decade. Over half of these students will be enrolled in employment-oriented courses, programs, and curricula. I use the word employment-oriented advisedly, because in a democracy we cannot mandate that a student who begins in technological studies will end up in sub-professional employment at the end of two years. Contemporary pressures are such that many graduates of these curricula will continue their studies through the baccalaureate and higher degrees and enter employment only at the end of four years or more of study. That in itself is not bad if you consider that the Community Colleges, by their existence, will have helped to increase the percentage of students who continue their education beyond the high schools so that Pennsylvania can move toward the national average.

Those who are asked why they climb mountains give the answer, "Because they are there!" This holds true for accessible Colleges. They will be attended "because they are there"--and also because the demands of a technological society place a premium on that attendance.

Range of Educational Services

In terms of variety, there is no dearth of institutions offering employment-oriented education. Here in the Commonwealth one can list junior high schools and high schools: vocational-technical schools: private business schools and technical institutes: four-year colleges and universities which offer adult education courses and certificate and associate degree programs; agencies and schools specially funded by federal, state, and municipal governments to accomplish specific training tasks; enterprises such as the Opportunities Industrialization Corporation in Philadelphia; Churches and Community Centers; correspondence schools; and last, but certainly not least, the Community Colleges.

Can the Community Colleges really claim to be able to make a unique contribution in the field of occupational education? What can they do that a Technical Institute, or a 13th or 14th year Vocational-Tech School, or some other hybrid institution can't do equally well or better? If

there were ever such a thing as a Master Plan of Higher Education in the Commonwealth, is there a "something" so unique that Community Colleges can do that a new P.P.B. System notwithstanding, they would be permitted, encouraged and funded to do it?

Unique Contributions to Occupational Education

I think that there are unique contributions that Community Colleges can make and that they derive from three considerations: what they are; where they are; and why they are.

With respect to what they are, I think we must insist that they are Colleges. Their orientation is toward higher education, not the secondary schools. Even California, where the comprehensive Community Junior Colleges once emerged as 13th and 14th grades of the public school system, has recognized this fact. There the allegiance with secondary education has been severed and the two-year Colleges have been restructured with their own funding districts and their own professional prerequisites. In a true Community College there are few vestiges of any earlier kinship with secondary education.

The fact that the Community Colleges are, indeed, Colleges, has facilitated their recruitment of faculty from a variety of sources: from the graduate schools; from the ranks of the educators who have wearied of the publish-or-perish pressures of our modern research-oriented universities and who wish to devote their best energies to instruction; and from the professions and commerce and industry.

It has been observed by one of my philosophical colleagues that there are three major reasons and one minor reason why professional and industrial personnel in increasing numbers seek sanctuary on the College campuses--namely, June, July, and August and two weeks at Christmas and Easter. Be that as it may, Community Colleges, as Colleges, do have a recruitment advantage in attracting from the practical world of affairs persons who can, after appropriate orientation into the mysteries of the cult, make particularly fine contributions in occupational education.

The fact that we are Colleges does lend an aura which facilitates our relations with the professional, commercial, and industrial enterprises of the community. They are part of the community which we serve, the community from which we derive our name. The fact that we have on our faculties persons who are intimately acquainted with practical affairs helps to provide a bridge between the traditional ivory tower and the world on the other side of the moat.

The fact that the Community Colleges are labeled and deport themselves as Colleges is also an important consideration in the recruitment of students. Young people, fresh out of high school, aspire to an institution different from the one which they have attended. I do not say that our young people are right in their judgments of the comparative merits of the institutions offering those two extra years beyond the

secondary schools. Some of them may benefit more educationally from the structured framework of a 13th and 14th year offered in a secondary school than from a two-year tour of duty in a Community College. I am merely saying that there is more appeal for them to continue their education beyond the high school if a Community College is available to them.

If the preference which young people just leaving high school have for a college, vs. an extension of their secondary high school experience is strong, it is stronger still in the case of the returning veteran or the young man or woman who worked for a few years after graduation from secondary school and now wishes to return to formal study. The preference is highest of all among those who have been out of high school for an extended period of time and who, as mature individuals, are inspired to resume their formal education as Continuing Education or part-time or full-time College students.

Within our mature population one segment in particular constitutes a special challenge to the Community College in respect of occupational education. This segment is composed of the "empty nesters," women who have married comparatively young, whose children are in school, and who are now ready to return for formal studies which will prepare them for remunerative careers.

The ability of the Community Colleges to attract both faculty and students derives not only from what they are--namely, Colleges--but from where they are. They are deliberately located where the action is, at the points of concentration of population and as close to the crossroads of commerce as the realities of real estate will permit. In the case of the Community College of Philadelphia, we could have been more centrally located and accessible only if the Mayor and City Council had moved out of City Hall and turned it over to us. The Community Colleges are institutions for commuters. Their availability--geographically and financially--constitutes a most appealing invitation to persons of all ages and background to prepare, through higher education, for new occupational opportunities occasioned by our technological revolution

With respect to occupational education, what the Community Colleges are is important and where they are is important, but why they are--their philosophy and rationale of existence--is most important of all. Community Colleges are multi-purpose institutions because they recognize that the needs and interests and capacities of people differ. Therefore, it follows, that the educational paths by which people can become all that they are capable of becoming must differ. The Community Colleges do not prejudge the constituencies they serve or put a scale of values on the educational services which they offer, a scale which gives highest priority to liberal arts, college-parallel curricula and the lowest to occupational curricula. Both types of curricula exist on a parity.

A moment ago I claimed as one of the strengths of the Community Colleges the fact that they are truly Colleges, oriented toward higher education and, therefore, attractive to professionally qualified personnel who make up their faculties. Paradoxically, the very fact of the Community College orientation toward higher education, and their capacity to recruit "collegiate" personnel and large numbers of young people who are starry-eyed about getting an eventual baccalaureate degree poses a threat to occupational education in the Community Colleges against which guard must be posted. We must never underestimate the imprinting which has been accomplished on our present generation of scholars and teachers by their alma maters. The fact that a technological and societal revolution has now placed all of us in a new frame of reference has not automatically altered the attitudes and values of teachers in our basic disciplines. Subconsciously, they still respond to the gravitational pull of a traditional collegiate education in which salvation is gained only through a liberal arts curriculum--or modified liberal arts curriculum which we call pre-professional--which leads to a baccalaureate degree.

If there is anything that distinguishes a collegiate occupational course or curriculum from a non-collegiate course, it is the proportion of time which is devoted to the "why" of the subject matter in contrast with the "how", the balance between pure, abstract theory and applications. It is precisely in this "why" area that the basic discipline oriented personnel of the Community Colleges have a special contribution to make. Strong college departments in math and the physical sciences undergird the engineering technologies; the life sciences undergird the curricula leading to careers in allied health fields; the social and behavioral sciences provide the foundations for careers in the human service area; economics complements business administration; and even the humanities have a direct and practical contribution to make to the applied arts. It is not necessary to exclude an exposition of "why" within a course which is titled in the Bulletin as a "how" course; neither is it necessary to exclude "how" from the courses which, according to the Bulletin are "why" courses. It is in the blending of basic disciplines with applications disciplines that Community College instruction can have the most meaning for occupational education and can make a unique contribution. This is one of the advantages that comes from running a comprehensive college--an educational department store--or is it an educational smorgasbord?

Industrial and Engineering Oriented Occupational Education

The number of industrial and engineering oriented technology programs which have already been introduced in Pennsylvania's new Community Colleges would suggest that the Community Colleges feel that this is an area in which they can make a significant contribution. With continuing education and special certificate course sequences they have also demonstrated their concern for helping to improve the competence of personnel already on the job. The strengths which the Colleges have in the basic disciplines of the physical sciences and mathematics undergird these efforts.

That the Community Colleges are already faced with temptations is attested in the minutes of at least one meeting of the Council of Community College Presidents when the most discussed item of the agenda was the transfer ability of technical arts graduates to upper division work, either for a Bachelor of Science degree or for a Bachelor of Technology degree. Subsequently, we even held a special meeting with representatives of the University's Capitol Campus to make sure that we were not missing any tricks in the preparation of technology students in engineering and business fields who might want to transfer there.

It is important that we try to keep a number of options open for the students who enroll in our technological curricula, that we keep an educational ladder open to them, and that we endeavor, wherever possible, to steer our students into employment which offers a promising career ladder. The Community Colleges, with the great variety of courses available on their "smorgasbord", are in a good position to do just this. The danger lies in stressing one option--transfer to a baccalaureate institution--to the exclusion of options that would lead large numbers of students in the engineering technologies directly into employment at the end of their Community College studies.

We have concluded that, if we are to do our job well, we need to know a great deal more about the needs of industry for engineering support personnel; the manner in which such personnel are now utilized; the manner in which they might most effectively be used; the types of careers ladders which are available; and the most meaningful patterns of collegiate preparation.

Through our local industrial advisory committees some of this information can be marshalled, but an overview is needed if we are to fulfill our mission. The Council of Community College Presidents is collaborating with Educational Projects, Incorporated in an attempt to fund a major study which would:

(1) Develop methods and procedures for identifying and quantifying the several levels of technical personnel needed in the various public and private enterprises of the Commonwealth.

(2) Establish the types and general format and content of educational programs needed to meet the personnel requirements which are ascertained; and

(3) Develop programs to insure maximum understanding by employers of the capacities of the several levels of technical personnel and to insure their most effective utilization.

Business Oriented Occupational Education

The range of offerings and the enrollments in our Pennsylvania Community Colleges in the field of business administration would suggest, on a first glance, that quantitatively, at least, we are in a position to make an immediate major contribution to the pool of skilled manpower. The second glance, however, indicates that a considerable majority of the graduates in the business technologies are not entering employment but are moving on to the baccalaureate institutions. Opportunities for transfer to a variety of Colleges and Universities are excellent.

There are unique contributions which the Community Colleges can make to education for business careers at several levels because of their location with respect to potential places of employment for full-time students who wish to work part-time, either on their own or within a structured program of Cooperative Education, or for full-time employees who wish to study part-time. Strong programs of general studies and strong departments of computer science provide an appropriate complement to the specialized business courses. I should note, parenthetically, that in one particular area--the secretarial sciences--we find that potential employers are all too ready to pluck the fruit off the vine before it is fully ripe. The job opportunities for secretarial students are so good that many are tempted to leave their studies at the end of the first year.

Education for Human Service Occupations

If I say very little regarding the role of the Community Colleges in business education, it is not because that field is less important or promising, but because its potentialities are so obvious. What I should like to stress are the areas in which there is the least competition from other established institutions and a maximum challenge to the Community Colleges, namely, the fields of human service and allied health and medical service.

In the summer of 1967, Community College of Philadelphia, with the help of a grant from the Sears-Roebuck Foundation, conducted a survey of needs for two-year educational programs to prepare persons for ultimate employment in a growing number and variety of public, quasi-public, and private agencies and offices concerned with the provision of services by people to people.

We found clear evidence that the supply of human service paraprofessionals was falling far short of the demands in the fields of education, recreation, law enforcement, and in the many facets of social welfare. The range of requirements for jobs to be filled was such that we could envisage a variety of experimental programs offering different degrees of training to match the manpower supply with the demands for workers in the human service occupations. These programs included continuing education courses and certificate short course programs to upgrade persons already employed full-time; two-year work-study programs

to augment the "self-selection" process in human service occupations; and two-year programs so constructed that they would enable students to have ready access to higher levels of professional accreditation, either by further part-time study or by full-time study.

At C.C.P. we have created a Division of Social and Behavioral Sciences and Human Service Careers which houses the teaching personnel in the disciplines of the social and behavioral sciences and the personnel who teach the "applications" courses for human service occupations. While these two types of personnel can work effectively in double harness, each reinforcing the other, the real find is the teacher who is well grounded and properly credentialed in his discipline and who has had good field experience as a professional. As a collegiate institution in a city filled with a great variety of public, quasi-public, and private agencies and offices concerned with the dispensing of human services, we have been able to attract, as full-time teachers, persons who can double in brass and who are competent to teach both in the "pure" subject fields and in "applications" subjects. Where total enrollments do not yet provide enough students to require multiple sections of certain subjects, it is both feasible and possible, because of our location, to obtain qualified professional personnel as part-time instructors. There is also some advantage in having links with a variety of agencies in the persons of such part-time instructors. The agencies can extend and complement the College's instructional programs by providing the "practicum" essential to the adequate preparation of paraprofessionals in the human service area.

While I could cite a long list of current Pennsylvania Coummunity College offerings in the human services fields, ranging from the preparation of nursery school aides to the improvement of the lot and capacities of our law enforcement officers--whose life even Gilbert and Sullivan conceded "is not a happy one"--I shall mention only two projects of Community College of Philadelphia which illustrate types of service which the Community Colleges can render in the human service field.

Our market survey of requirements for human services personnel identified an urgent need for paraprofessional personnel who could serve as assistants in the field of Mental Health work. With the help of an Advisory Committee composed of leading professionals in Philadelphia's public and private agencies, we were able to develop a two-year curriculum leading to the A.A.S. degree. In addition to their studies in general studies and in such fields as the behavioral sciences, group dynamics, and psychopathology, students have practical field work experience in a variety of settings, including psychiatric hospitals, community mental health centers, facilities for gereatric patients, and children's service. They learn interview techniques, inter-personal relationship skills, and importantly, staff teamwork. Their ultimate employment opportunities will be found in such areas as activity therapy, individual counseling, group and community work, and liaison work among agencies and the constituencies they serve.

Federal funding was obtained through the National Institute of Mental Health and assurance of support of some students during the practicum was obtained from certain of the agencies. A total of 57 students were enrolled in September, 1968 and 51 in September, 1969.

The second project--essentially a continuing education course--was another bi-product of our market survey of needs for better qualified and more effective human service personnel. Having identified a need, we worked closely with the Department of Licenses and Inspections of the City of Philadelphia in designing an intensive three-week program which would give members of the field staff of the Department a greater awareness of the larger political, social, and psychological issues implicit in their daily assignments. The course was intended to give them a better understanding of their ability, through a new approach to their work, to minimize the antagonism toward the City of persons affected by code enforcements, to assist citizens to practical solutions of their problems, and to achieve the desired community goals of improved housing, cleaner environment, and responsible citizenship. But simply, our objective was to "humanize" code enforcement and inspection.

As of this date 300 Department of Licenses and Inspections employees, in successive groups of 25, have taken three weeks - 90 hours - of intensive instruction at the College. Another 150 will move through the program in the months ahead. The College's experience with this one department of the City has led to promising discussions with the Police Department, the Regional Post Office, and other public agencies in the fields of housing, planning, and urban redevelopment.

Education for Health and Medical Service Occupations

There remains a special cluster of human services which can be identified with the health needs of human beings. Here we are concerned with paramedical personnel--or if you prefer, allied health and allied medical personnel. The list of the specialized support personnel needed increases with each forward step in medical science. We can identify and quantify the need for personnel needed in various categories by conducting the usual run-of-the mill market survey, but there is reason to believe that the role which the two-year post-secondary graduates can play is not yet fully revealed. The usual market surveys assess needs for personnel in terms of the structure of medical services which now exists. If we were to undertake a systems analysis of needs and defined what it is we want and are prepared to pay for, we would certainly come up with an entirely different picture of the requirements for personnel. Conceivably we could, in the long run, render a much greater medical and health service for large numbers of persons, and at a lower unit cost, than we do now. It is not the function of the paraprofessional to replace the professionals, but to complement them in such a way that the professionals can accomplish more, at a higher level of service, than they now can.

Our literature speaks more often now of "health delivery systems." I feel that the Community Colleges have a unique role to play--because of what, where and why they are--not only in the educational preparation of paraprofessionals, but in the development of the new "systems" and new patterns of collaboration among the educational and health service institutions. As a step in this direction, and with the help of a Title I Grant, C.C.P. is currently engaged in a feasibility study of the means of developing Allied Health Services Training Consortiums designed to increase the effectiveness of training of allied health personnel in specific fields and to provide a better product for the output of money.

Challenge of the "Empty Nesters"

Because of our locations with respect to the concentrations of population, and because we are a commuters' college we are able to draw into educational programs which prepare for employment in the human service and health service areas not only the young people fresh out of high school, but their parents, particularly mothers who are "empty nesters." A good case can be made for giving priority in admissions to young people, but we know from experience that over 90% of the young ladies who enter employment after graduation from two-year colleges will marry within a few years. Whether they will remain in employment after marriage depends on a number of circumstances, a very important one being children. There does come a time, however, when children are out from under foot and women can either return to employment in an occupation for which they were originally prepared or can be prepared for employment in a new field on a full-time or part-time basis. The "empty nesters" constitute a stable addition to the working force and a promising market for Community College services.

The Community College has a special role to play in the education of "empty nesters" because of its accessibility, geographically, financially, and at terms of the hours of the day in which we offer our programs. We find, for example, that we have opened a whole new market for nursing program applicants because it is not necessary for the students to take up residence in a hospital nursing school dormitory. Furthermore, the program can be successfully completed in two-years. A graduate from a nursing program at the age of 35 has from 25 to 30 productive years of service ahead in her chosen field.

At C.C.P. we draw no distinction between day and evening or regular term and summer. We have one program which is extended throughout the day from 8 A.M. until 10 P.M. and throughout the year. The same accessibility that make a Community College appealing to an "empty-nester" appeals to the employed male who aspires to make a shift from one occupational area to another or to prepare himself for a higher level of competence in the field in which he is currently employed, either by pursuing a regular course of study or by taking continuing education courses.

The doors of some of our traditional colleges are open to the top 6% of the high school graduating classes. The doors of the Community Colleges are open at least to the top 60% and often to the top 100%. Some applicants have not mastered the basic tools which they will need to undertake successfully the job of further education and they constitute a special educational challenge. There are many ways in which they can be helped to a higher level of performance. They can be offered smaller bites, part-time programs rather than full-time programs: they can be offered special courses which will sharpen their skills in language and numbers; they can be taught in special settings--developmental education we call it--in which we employ some of the new techniques of instruction.

We have found that the key to success in these educational efforts is motivation and that motivation is strengthened when there is some relevance of the subject matter taught to the lives and aspirations of the student. Occupational education is, indeed, relevant. Coupled with employment opportunities while the student is still in College, occupation oriented education can sometimes turn the students on when all else fails.

How Can the Community Colleges Do More?

The Community Colleges of Pennsylvania are off to a flying start, but there are a number of things that must be done if they are to reach their full potential in the field of post-secondary occupational education.

Considering the needs of the State as a whole, we must complete the network of Community Colleges. There are now twelve and one operates three campuses. Others will eventually be multi-campus operation. One of the studies conducted for the State Board of Education identified 26 possible locations for Community Colleges.

The Community College Enabling Legislation must be improved and brought up to date in terms of current financial realities. The law of 1963 established a pattern of funding which has proven to be a straightjacket for development of new technological curricula and the introduction of comparatively high cost remedial and developmental programs. The present ceiling of $1,000 in terms of which the State calculates its participation in the funding of the Community College operating costs must be raised. Another inequitable--and in terms of federal legislation, illegal--aspect of the enabling legislation is a provision which permits the State and the local sponsor each to recapture half of any monies that are obtained from federal sources--this despite the fact that federal funds for such programs as those in the vocational-technical area are provided to supplement, not replace, local monies.

Recognizing that one of the reasons students elect two-year college-parallel curricula in preference to two-year occupational curricula is the possibility of a four-year deferment of military service, we must improve our selective service laws--or improve the world circumstances which necessitate drafts in the first place--in order to increase the appeal of occupational education.

We must clarify the roles which paraprofessional personnel in all occupational fields can play and define better the career ladders which are open to them. Some progress is being made in the civil service classifications, but the real clarification will come when the employers of paraprofessions recognize fully the roles which two-year graduates can play.

We must clarify the respective roles to be played by the Community Colleges and the many other post-secondary institutions concerned with occupational education. While I doubt whether it will be possible, because of their essentially different educational philosophies and approaches, for the Community Colleges and the Vocational-Technical Schools to occupy the same premises, there are areas of articulation and cooperation which can be mutually beneficial.

We must strive to bring nigh school teachers, counselors, parents, and young people to a better understanding of the significance of occupational education at the post high school level. That education need not be terminal. Indeed, our host today, the Pennsylvania State University has, by introducing baccalaureate programs in a wide range of technologies, provided a unique opportunity for graduates of A.A.S. programs to continue their studies either immediately upon graduation or after a period of employment. However, it is important that the occupation-oriented curriculum and the A.A.S. degree enjoy respect for their intrinsic merits.

I don't know whether the contemporary Baccalaureate Syndrome and the Sheepskin Psychosis are medical, educational, or cultural phenomena but I do know they exist and that they affect negatively our efforts in the field of occupational education. These phenomena are mirrored in the attitudes of our Community College teachers and in the aspirations of our applicants for admission. We do our best at C.C.P. to preach the true gospel, but the total immersion of our faculty (drawn largely from non-Community College sources) in, and conversion to, the philosophy and goals of the comprehensive Community College has not been instantaneous. If forced to confess, I would have to admit that my own conversion to the truth came like Saul's conversion on the road to Damascus, in a blinding light. As a product of American liberal education I had, before salvation, done my snare of needling of the Community College concept.

We have some evidence of progress in missionary efforts and proselytizing at C.C.P. While pockets of articulate resistance to the concept of a comprehensive college still remain, there is reassuring evidence that there is, overall, a better understanding and acceptance of what C.C.P. is and where it is headed than we had during our early years of operation.

The "pockets of articulate resistance" to the concept of the comprehensive Community College do, on occasion, stimulate the interest of, and enlist as allies, equally articulate students. At the end of the Spring Term, 1968/69, feature stories and lead editorials in the College newspaper posed the question "Community Vocational Tech?" and drew invidious comparisons between a "broad, liberal education" and a "narrow technical education." This year's editorial staff, encouraged by the liberal artists--and artful liberalists--of our faculty have picked up the cudgel again. But perhaps this is in the best academic tradition.

The Perennial Question

Over the ages teachers and scholars have disputed among themselves--and they dispute still--the question propounded by Aristotle: "Whether to instruct a child in what will be useful to him, or in what tends to virtue, or in what is excellent." It is hardly likely that the issue will, in the near future, be resolved to the point where it ceases to stimulate academic adrenalin. The comprehensive Community College is predicated on the assumption that learning to live fully (i.e., being liberally educated) and learning to make a living are not mutually exclusive processes but are, indeed, opposite faces of the same coin. This is most apparent when the coin is standing on edge. Unhappily too many of us prefer to place the coin flat on the table, with our favorite side up.

How easy it is to forget that the now traditional "liberal arts" curriculum was originally a "trade" course designed to prepare a fairly small percentage of our population for careers in the ministry, law, and education. In a society which has been revolutionized by modern science and technology, a host of new and challenging careers has emerged. It is the task of the Community College to explore, and to blaze for large numbers of students, paths to these careers. The requirements of technological curricula which take their themes from our modern, urban, industrial society are no less exacting, and no less broadening, than those of a traditional liberal arts curriculum. Furthermore, the relevance of these curricula to societal needs helps to "turn on" large numbers of students in a way that is very reassuring.

The Community Colleges of Pennsylvania have a mandate for community service which we must fulfill in order to be worthy of our title. They must be responsive to community needs. Indeed, at times, they must anticipate needs and develop the means of meeting them even before they may have become fully articulated by the community at large.

Our first great contemporary challenge is not to prepare a small number of persons for a selected number of traditional occupations but to prepare large numbers of persons for a steadily increasing number of career opportunities, at the same time giving them insights into themselves and the society of which they are members.

The second great challenge, and one to which the Community Colleges earnestly endeavor to respond, is to excite in students such a degree of intellectual curiosity and capacity for self-education as will insure their ability to reorient themselves, should it ever become necessary, in a dynamic society.

Since change, like death and taxes, is one of the few certainties of life, the Community Colleges have their work cut out for them.

Post-Secondary Occupational Education and the Pennsylvania Master Plan for Higher Education

Louis W. Bender
Assistant Commissioner of Higher Education
Commonwealth of Pennsylvania

It is a pleasure to meet with you during this conference when you, who will be primarily responsible for the future direction of post-secondary occupational education, examine issues and developments as presented throughout the session today. The developments in the Commonwealth of Pennsylvania must be our first concern, yet we can gain much insight by studying the national picture described by Lou Fibel.

When Dr. Gillie invited me to discuss the Master Plan and its implications for post-secondary occupational education, I did not realize how difficult the assignment would be. In fact, I feel a little bit like the young lady who, when driving west this past summer on a hot humid day, found herself in an awkward situation. She was driving along, bothered by the heat and humidity, when she noticed off in a secluded spot, a most inviting lake. She left the main highway and drove to the secluded lakeside. Following a thorough visual search of the lakeside, she concluded that there was no one about, and, thus, decided to partake of the joys and coolness of the water, even though she did not have the benefit of a bathing suit. Sometime later, she looked up to discover that on the shore between her and her clothing stood a man. She tried to be as hidden as possible, but then realized that he stood observing her. Finally, she called to him and asked if he would leave in order for her to leave the water and get dressed. He said nothing and remained standing there. She then explained her dilemma and appealed to him as a gentlemen to leave, but he said nothing and continued to stand there. Finally, after berating him, she looked into the water and saw a wash tub. Picking up the tub and holding it as a shield, she advanced toward the man and explained in anger, "Do you know what I think?" He replied, "Yes, you think there is a bottom in that tub!"

It seems to me that I have been asked to deal with a wash tub that has no bottom.

Document or Process

When we here discuss the Master Plan, I believe we often are misled by what it is, particularly when we hear those who argue that there is no Master Plan or that it never had significance beyond its adoption by the State Board of Education. Others argue as vehemently that the Master Plan exists and has been implemented to a great extent. I would call your attention to the error of such debate for it implies that the Master Plan is a document only. And I am sure that many here today are expecting me to outline implications, time schedules, and content of a document which will succeed the present one.

The most important implication of the Master Plan, I believe, is the fact that process rather than document is the true nature of the Master Plan. Not only will the general good health of higher education be enhanced through the person-to-person contacts of the Task Force deliberations, but more importantly Pennsylvania, in the same manner as we can identify across the nation in other states, has undertaken the on-going process of planning, evaluation, and priority determination.

The most significant implication, then, I would call to your attention and urge your full commitment, is the fact that the Master Plan is a process. This process should provide for the written word and for action which will give dignity and status to all forms of education and training, as well as career activities. It has been clearly and accurately stated today that a major deterent to an educated manpower is the social value system which makes second-class citizens of those who would pursue post-secondary occupational education leading to careers requiring manual skills and dexterities, as well as theoretical and analytical abilities.

We in the educational community, as well as leaders in labor, management, and development, must contribute to the process of bringing John Q. Public to understand that many satisfying productive and rewarding careers can be achieved through short-term and two-year post-secondary occupational programs and that our educational system is moving toward provision for preparation at career-ladder levels. We are moving toward the age of education as a life-long activity and I would caution everyone here today to give appropriate consideration to continuing education when you meet in your discussion groups.

We realize that there is more to post-secondary education than merely that which would be described as the liberal education. We have passed from the age of education of an elite and the Master Plan as a process through the participation of all of us should provide a significant influence in achieving equalization of opportunity, as provided in our Bill of Rights.

In order to appropriately relate the Master Plan for Higher Education to our deliberations, I shall attempt to paint with brush strokes the background picture of the legal and philosophical foundations of the present Master Plan and then fill in the picture in more delicate brush strokes the present effort of the State Board of Education to review the Master Plan and to further the orderly development of all higher education enterprise over the next 5 or 10 years.

Legal and Philosophical Foundations

In 1963 the General Assembly created the new State Board of Education by Act 94. This single Board for all education represented a significant departure from the usual pattern of governance in other states where separate boards for basic and higher education typically would vie

for their share of state moneys. The philosophy inherent in the single Board is obvious but necessarily involves many diverse and complex problems for each of the various levels and segments of education for unique characteristics requiring considerable study and attention.

All of you know, Act 94 provided for two separate Councils within the State Board of Education and made up from its members which would concentrate on problems and development of education in either basic or higher education. Among the variety of challenges confronting the new State Board of Education was a provision in the law calling upon the new State Board to achieve school district reorganization. Another legal mandate called for the development of a Master Plan for Higher Education.

Nature of the Master Plan

The State Board of Education commissioned a number of studies by outside consultant firms on different levels or aspects of higher education preparatory to the development of the Master Plan. I am sure most of you here are aware of the McGrath Report on "Organization of State Colleges within the Commonwealth of Pennsylvania", the Fields Report on "Community Colleges in Pennsylvania", the Academy Report for educational development on "Elements of a Master Plan for Higher Education in Pennsylvania", and the Daulwalder Report on "Vocational Education". The Master Plan is described as a living document in the preface for the State Board of Education views it as merely a stage of development in higher education or better described as long-range goals with suggested guidelines for achieving those goals. The State Board called for continuous updating and revision as circumstances required, as well as an indepth review at intervals of not more than 4 years. Since the Master Plan provides a statement of goals for use in establishing priorities at the state level, it would seem appropriate now for us to examine some of the strategy and philosophy inherent in the present Plan.

Strategy within the Master Plan

1. Chaos to Order

It has been said that higher education in the Commonwealth has developed in a chaotic and unorderly manner over the years. Individual institutions were established and developed with little benefit of information or support of the state. Undesirable competition frequently resulted within overlapping service areas or in the halls of the General Assembly which evolved a most unusual pattern of financial aid granted to a portion of Pennsylvania's 120 private institutions. These grants were seldom based on rationale other than the legislative muscle which the college or university could demonstrate through a lobbying process.

It is obvious, then, that an immediate strategy of the Master Plan was to design an organizational structure for the orderly development of higher education with particular emphasis on those institutions receiving state moneys. All of you are familiar with the Commonwealth's system outlined in the Master Plan which provides for the 3 segments of community colleges, the state-owned institutions, and Commonwealth universities. It called for the coordination of the institutions within each segment and coordination among the segments. I will come back to this point later.

The next strategy confronting the State Board was to provide a means of supplanting the existent pattern of direct aid to some private institutions with a rational system of assistance which would serve the Commonwealth best while preserving the strength and viability of the private colleges and universities. It did this through recommending a phasing out of aid to private institutions, but with a concurrent initiation of a doctoral support program and a professorial incentive program of aid and assistance. It was calculated that these 2 new programs would provide essentially the same degree of financial support to those institutions which had been receiving state money but at the same time would foster or strengthen graduate programs where some of our greatest technical and scientific manpower needs are most acute. All of us are aware of the Pennsylvania Higher Education Assistance Agency - PHEAA - which was called for in the Master Plan on the strategy that scholarship and loan awards to students would serve the dual purpose of assuring free choice of qualified students to attend the higher tuition private colleges and universities, as well as to provide support for the private colleges and universities.

2. Coordination

A significant strategy within the Master Plan was that of coordination within higher education in Pennsylvania. The Master Plan called for the creation of an Office of Higher Education with a Commissioner who has come to play a major role in achieving such coordination. Pennsylvania is one of the few states in the nation that has a single State Board of Education and we now have a single Department of Education, but with appropriate provision to serve basic and higher education.

The Master Plan called for coordinating councils to be formed among the 3 segments within the Commonwealth system and a Liaison Committee between the private institutions

and the State Board of Education. The final illustration of the coordination strategy within the Master Plan was provision for budgetary reviews and the development of a formula approach to operating budgets for the several segments.

The Master Plan Review Project

Now we are in the midst of an in-depth review of the present Master Plan. As most of you know, we have organized 7 Task Forces which are conducting investigations into specific issues. These include: Philosophy and Governance of the Commonwealth System; Branch Campuses, Junior Colleges and Community Colleges - Present and Future: Private Higher Education; Mission Coordination and Accountability; Programs to Equalize Higher Education Opportunity; and Continuing Education.

Task Force #1 has been reviewing the pattern of governance proposed in the Master Plan which called for 3 segments of institutions primarily supported by State funds. The 3 were the Community College segment, the State College segment, and the Commonwealth University segment. The latter is composed of Penn State, Pitt, and Temple. It is interesting to note, however, that originally the "Commonwealth's System" was to advise the public institutions since the State Board of Education felt it necessary to move toward an orderly development of state-level coordination on a voluntary basis. It would appear that Task Force #1 and Task Force #3 now feel that public and independent institutions should be viewed under a single integrated system.

Task Force #2 was established in an effort to resolve the long standing conflict between branch campuses and community colleges where some communities have contributed to the support of higher education to serve their local constituency, while other communities have deliberately sought to avoid local taxation for the same avowed purpose. This Task Force has studied statistical data related to the operation of the two types of institutions, as well as formulas for assessing appropriate services from each which might serve at the local level. It will be helpful if those of you who have particular concerns or views which would be helpful to Task Force #2 to communicate it to the Chairman or to one of the members.

Task Force #3 on private higher education was one of the obvious concerns of the State Board for any review of the Master Plan. The original Plan had not given comparable attention to the independent sector as it had to the public sector. This is understandable when we recognize that the State Board of Education was charged by the Legislature in a climate of concern over the amount and method of distribution of state funds. Task Force #3 has proceeded rapidly in its analysis of problems confronting the independent sector. I would call your attention to the fact that a member of this Task Force represents the proprietary schools of the Commonwealth which were

recently recognized by the State Board when it passed regulations for a new type of associate degree for specialized occupational programs over two years' duration.

Task Force #4 was originally titled "Mission Assignment". The connotation of assignment offended many; hence, the new title became "Mission Coordination and Accountability". The original Master Plan called for roles and responsibilities of the different segments of higher education to meet the needs of the Commonwealth. Task Force #4 has been examining the approach and procedures which might be considered to achieve this goal. It appears clear that some systematic approach for determining Commonwealth needs must be developed and I would suggest that you read the Arnold Report on "Vocational, Technical, and Continuing Education" which outlines a systems approach pertinent to post-secondary occupational education and, perhaps, indicative of what might be proposed by Task Force #4.

Task Force #5 was renamed "Programs to Equalize Higher Education Opportunity" after criticism of the original title focused on the term "disadvantaged". This group delimited its study to concentrate on programs for the Black disadvantaged initially before it moved to the other groups and types of disadvantaged, as far as higher education opportunity is concerned.

The original Master Plan did not include any study or a statement on continuing education. As a result, Task Force #6 is, in a sense, pioneering. It will not only inventory present program, but will attempt to design a strategy for continuing education throughout the Commonwealth and encompassing the various agencies and institutions which would be involved in this enterprise. Again, I would urge all of you present to become an active participant in this activity by communicating your observations or recommendations. Post-secondary occupational education must be a continuing education for life if our citizens are to enjoy the best advantages of changes in technology and society.

The final Task Force has not yet become operative. Task Force #7 will deal with finance, but will become most active when the other Task Forces have made their reports.

Implications

It would be impossible to predict the substantive recommendations and over-all strategy of the successor Master Plan which is scheduled for completion in 1970. The reports of the Task Forces will need to be examined by the State Board and then a preliminary draft of the new Plan will be written by an Editorial Committee. This draft will probably be circulated in order for interested institutions, agencies, and individuals to make known their reactions before a final draft is prepared. I

believe, however, that it is possible for us to envision a number of implications for consideration by you leaders in the field of post-secondary occupational education. I shall attempt to enumerate 6 of them.

First, it seems apparent that the very existence of the Master Plan will bring greater coordination to all higher education activities. Institutions will certainly be expected to relate their plans and ambitions to the existing programs and services in their area. The Office of Higher Education will continue to play a significant part in over-all coordination for purposes of state planning. We can anticipate conferences of this nature and councils to be important elements of coordination where deans or department heads in occupational education can get together to discuss curriculum development, program design, etc.

Secondly, I believe, is what I would describe as a stage of activity which would naturally follow the coordination stage called for in the Master Plan. This second stage will be for central planning and development. Pennsylvania has not had adequate provision for long-range planning at the state level which could be helpful to institutions nor to the Legislature when establishing its priorities. We can expect this stage to be significant for post-secondary occupational education since manpower studies or analysis of technical development, which are conducted periodically at the state level with the cooperation of appropriate colleges and universities, will enable you to assess the nature and degree of programs your own institution might realistically anticipate.

The third implication is an outgrowth of the stage of planning and development I have just outlined. It is the systematic approach which will need to be developed at the state level which will provide assessment of needs of our society which institutions should accommodate. Again, I would call your attention to the recent report entitled "Vocational, Technical, and Continuing Education in Pennsylvania" and popularly known as the Arnold Report which outlines a systems approach for use in occupational education program planning. It is my belief that we will find the evolution of some similar system whereby continuing input of circumstances, developments, and requirements, particularly in the manpower fields, will provide a wealth of data which can be used for planning at the local level.

The fourth implication, I believe, represents the natural progression of all levels of occupational education from basic through higher which will need to be taken into account when establishing statewide priorities. We know that program planning and budget system (PPBS) is being developed for application in administering our state government. This approach will have been achieved to a great extent by the systems approach to planning and development I have just outlined. However, we need to view all levels of education in this planning process so that our area vocational schools and the proprietary schools are included in planning, since many of their programs, while not of associate degree level, will represent a significant output of manpower. Furthermore, many of their students will be turning to associate degree

institutions for further education and training. Hence, I believe a greater recognition of area vocational schools and proprietary schools will result so that a type of continuum of all levels of post-secondary non-degree through graduate school can be envisioned.

In this regard, I believe we will see greater emphasis on continuing education which should be of particular concern to you leaders of post-secondary occupational education. Task Force #6 is studying this important area of education which has been willfully neglected in the past. It would seem that continuing education will become a matter for policy consideration at many of our institutions and you may well wish to discuss this in your discussion groups.

Finally, I would call your attention to the 6th implication which is the future pattern of planning by the State Board of Education. We may well find that the Board will adopt a policy of quadrennial review and restatement of the Master Plan with annual ad hoc studies conducted during the years between. This pattern has developed rather consistently in some of the other leading states such as New York and Illinois. I believe it is significant for you because of the leadership opportunities you will have to identify issues or problems for such annual studies. For example, we may find an in-depth study should be made in the health-related fields or a manpower-demands study for graduate programs or we may find a study in the development of technologies requiring associate-degree-level-training personnel to be of higher priority. I suspect that a planning and development arm of the Office of Higher Education will work cooperatively with the institutions and with other agencies on some of these studies. For others, we can expect contractual arrangements between the State Board of Education and for non-governmental agencies such as the Center for Higher Education here at Penn State or even, perhaps, some of the individual consulting firms.

You, the leaders and planners for post-secondary occupational education, should make known your concerns and should begin by working together cooperatively and then vigorously participating in the development of the state programs and activities.

Introduction: Strategies for Resolving Selected Student Related Problems

Wilmot F. Oliver, Dean of Instruction
Community College of Delaware County

The community college has emerged as the people's college in much the same manner as the public high school emerged to provide universal secondary education at the close of the last century.

It promises a post-secondary opportunity for all the children of all the people. This promise has been a most difficult one to keep because of the diverse backgrounds of those seeking entrance through the "Open Door". Many of those seeking entrance believe that the only road to the good life is via the four year baccalaureate degree program. Aspirations and capabilities are often found to be incompatible and the open door soon becomes a revolving door.

John Gardner, former Secretary of Health, Education and Welfare expressed his concern for this problem in this manner:

"That society that scorns excellence in plumbing because plumbing is a humble activity, and tolerates shoddiness in philosophy because it is an exhalted activity will have neither good plumbing or good philosophy. Neither its pipes nor its theories will hold water."

This is the problem that will be attacked by the panelists during the next two days.

The panelists will attempt to outline strategies that have proved successful in resolving the many problems which confront the comprehensive community college during this decade of dynamic change. The panelists who will be making presentations this morning come from diverse backgrounds and bring many years of successful experience in their individual fields. Dr. Hartley Johnston, Dean of Instruction at the Community College of Beaver County has a rather unique background. He was an electronic technician while in the service, did his undergraduate work in music and has spent many years as a professional musician. In addition to this, he has a pilot's license and spends a great deal of his rather limited spare time flying. Dr. Johnston is particularly well qualified to speak on the problems related to Successful Strategies in Student Recruitment. His is one of the few new community colleges started in the last three years that can boast a larger enrollment in the technical-career programs than in the college transfer programs. How one goes about accomplishing this rather difficult feat will be the topic of Dr. Johnston's presentation.

Mr. Eugene Ventura, our second speaker, will discuss the role of the Career Planning and Placement Director in insuring a proper match between the student and the career opportunities available to him. This match will be continued to the point where the student is properly placed with an employer at graduation time. Mr. Ventura has spent many years in several different institutions in the area of Career Planning and Placement. At the present time he occupies the position of Director of Career Planning and Placement on the South Campus of Allegheny Community College.

Our last panelist, Mr. William R. Ferencz, is the Chairman of the Business and Management Services Division, Harrisburg Area Community College. He has more than 15 years of teaching experience in high school and community colleges. His Cooperative Work Experience Programs at Harrisburg Area Community College have been notably successful during the past four years. He will consider the very important role that Cooperative Work Experience Programs may play in broadening the educational opportunities available in all of the Technical - Career fields in a community college.

Successful Strategies for Student Recruitment, Planning, and Cooperative Work Experiences

S. Hartley Johnston, Dean of Instruction
Community College of Beaver County

Introduction

Each year the cry is heard that vocational-technical jobs go unfilled as unemployment is too high. The number of high school dropouts continues to bother the conscience of political leaders and educators with feelings of uneasiness. Additionally, there is the feeling that education is the answer to many of our social evils and further the feeling and fact that much of the education offered today is geared toward the verbal, theoretical and abstract kind of learning associated with something loosely termed an "academic" program of studies. The cry for plumbers, electricians, welders, draftsmen, stewardesses and data processing personnel is one which never seems to diminish. Jobs are waiting for the well prepared man or woman. Good jobs in terms of opportunities for advancement, pay and personal fulfillment. Many schools and colleges have been established in an attempt to bring together the student - training - employer triangle which represent a solution of some of our problems. Yet, with millions of dollars being poured into new institutions, particularly community colleges, the result is often a preponderance of liberal arts students and unfilled laboratories and shops in the vocational subject areas.

The college which I represent is one which from its inception has maintained a ratio of students clearly in favor of vocational-technical programs. This has not been by accident but has been the result of careful planning in line with a vision of what a comprehensive two year college designed to serve a particular community should be. An analysis of the institution and its growth reveals four main elements which are clearly definable and are under continuous scrutiny in the college's relation to its goal: publicity, faculty, equipment, and programs. All are interdependent and complementary. Effort in one must be communicated to all others for maximum effectiveness in attracting students to the college. Each of these elements needs to be carefully examined.

Students

Any discussion concerning recruiting students would surely be incomplete without some word about those who are potential students.

Automobile manufacturers research their markets. Clothing stores identify who will buy what. Cereal ads are aimed at an identified group of persons. The potential market for vocational learning is too often regarded as the intellectual leftovers or the high school dropouts. This

is a negative approach to recruiting students for anything. Individuals who might reasonably be expected to enter a vocational-technical program represent a cross section of the community. By the nature of the institution this must be true. These programs can range from highly abstract engineering curricula to complete "hands on" courses. Abilities and interest will vary as widely as the demands of the courses of study.

Some common characteristics are observable among students and are worthy of consideration in any effort to develop a successful recruiting program. Briefly, they are as follows:

1. Age. The average age of all vocational-technical students is higher than the average age of all liberal arts students.

2. Experience. Students entering a particular vocational-technical program often have had experience in the field before entry into college. This is important in considering faculty, equipment, and courses.

3. Self Understanding. Vocational-technical students more often than not know why they are in college, what they want to learn and what they will do upon leaving. They are not always desirous of obtaining a diploma or degree. Goals may be much more immediate rather than long term. Statistically, they can look like college dropouts because they become employable in a relatively short time and may not complete all requirements for the degree or diploma, yet they will have satisfied their reasons for entering a specific course.

4. Financial status. They attend a community college vocational-technical program because it is relatively inexpensive and is close to home.

5. Academic background. Varied. Motivation plays a large part in determining the success of students in these programs. Some subjective judgment on the part of admissions people as their desire to succeed, how realistically the student looks at his chances for success and how relevant his previous scholastic record is to what he is hopeful of undertaking, is essential in guiding the vocational-technical program applicant.

Publicity

A great faculty, marvelous facilities and equipment, well conceived programs, and a desire to provide technical education will be for naught if the word does not get out to the right people that these things are available. Publicity then becomes vital in selling the college to the public. Its importance, timing, location, and type for the best

results in technical areas are perhaps best understood by proprietary institutions. That high cost private vocational schools continue to prosper and grow might be considered as an indictment when a community college in close proximity cries that it is unable to fill its occupational program classes. Publicity or "salesmanship" is the answer.

Publicity based on truth, good programs, fine faculty, and the proper equipment and environment are the keys to the recruitment of students. A program of publicity which is massive, varied, and compelling, has proved to be the most effective method of recruitment. Publicity can take several forms, all of which contribute to getting in students. Among these are:

1. Word of Mouth. Tops in getting students to enroll in vocational-technical programs is one student telling another. This method must start somewhere and your faculty is one of the best places to begin. As a vocational program is conceived and before its actually starts, the person(s) responsible for teaching the subject should be allowed time to establish an advisory committee, get to know those persons responsible for the employment of the future graduates, and where applicable, the suppliers of equipment peculiar to that occupation. Word-of-mouth is particularly effective in occupational areas which do not usually require an extensive background in reading and printed media. Use of faculty becomes particularly effective when they are given the chance to create their own program and are responsible for its success.

2. Brochures and Pamphlets. Well designed literature which clearly states costs, content and the amount of time involved can do much to arouse interest in a particular course of studies. For maximum effectiveness these need to be widely distributed, especially to those places which would likely employ the graduate described in the literature. The potential student often knows something about his career choice and is likely to look at literature which describes the college's offerings if he sees it in familiar surroundings.

3. Career Days and College Days. As yet, not much as been said about recruiting through high schools. This very important source of students presents some unique considerations for college recruitment programs in vocational-technical areas. The characteristic of the vocational-technical student of knowing what he wants needs to be considered. This becomes evident when one looks at the occupational areas which are not difficult to fill, i.e. business subjects, nursing, and a few others. In essence, these students have been recruited for these

programs without much effort on the part of the college. Friends and relatives are already employed in many of these occupations and there is a certain amount of tradition, security and respectability in nursing, secretarial science, etc. It is a relatively simple matter to work through the guidance personnel of the local high school to encourage students to go from one learning situation to another similar one at a college. More remote occupational programs or those which are not as "respectable" or commonly accepted, represent an entirely different ball of wax.

Career days can be very effective when high school teachers get together with the college teachers to talk about what is available for the students. The best contact at the high school level for guiding students into college occupational programs are those teachers who most clearly understand what the occupation demands and what its rewards can be. This implies that the careful cultivation of key high school teachers by the college will help to get students into programs which have some familiarity and appeal to high school students. A successful career day at a high school must be the result of careful planning by all college personnel responsible for recruiting.

4. News Media. Day to day contact with the public is best maintained through the news media. Appeal to students is most effective when it brings to light some known personality or shows the acquisition of new equipment. It cannot be over stressed that vocational-technical students are extremely aware of the relevancy of what they are to learn. Newspapers, radio and TV can keep them aware of what the college has to offer in the line of faculty, facilities, and equipment.

A distinction between the "paid" and "unpaid" aspects of news must be made. For general college advertising, a budget should be established and equitably distributed among the news media of the area. Free advertising is there for the asking. A staff member with a flair for writing news releases and a nose for news every day can keep the vocational-technical program in the news. Pictures of new equipment, the employment of faculty, awards received by students and faculty, lists of students, and gifts from industry are welcomed by news media, especially when presented in final form for publication.

Faculty

Of all the elements which go into the successful recruitment of vocational-technical students, the faculty is the most important. They become philosopher, teacher, purchasing agent, recruiting agent, placement officer, guidance counselor, advisor, facilities expert, industrial liason officer, and thorn in the administration's side if they are worth their salt. Above all, they must have the respect of their peers. This means that among other qualifications, they possess the ability to demonstrate what is going to be taught in a manner that your best statement to industrial employers (who will try to hire them) is that the students of the program will be trained as well as the person teaching them. This critical area of student recruitment must never be underestimated.

Much is said of the credentials necessary in any endeavor. Without the usual string of letters which collegiate people put after their names, it would appear difficult to establish "credentials" for vocational technical faculty. It has been our experience, however, that the best faculty in vocational-technical subjects have some characteristics in common:

A. Their credentials include a long list of short term "schools" in specialized subject areas. (G.M. Transmission School, Hobart School of Welding.)

B. They hold the certification which makes them desirable to business or industry because of its specialized nature. Atomic Energy Commission Certification, Multi-Engine Pilot Rating, Certified Public Accountant, Registered Professional Engineer, and American Institute of Architects.

C. They maintain close contact with developments in their fields as evidenced by their constant requests to attend "up-dating" schools and seminars, and their requests for the "latest" equipment.

Students in occupational subjects are particularly aware of what is going on in their field. They often have extensive backgrounds in a subject and come to class to get the details of recent developments. Good faculty are on top of new developments, better faculty are teaching them.

D. They have a history of success in whatever they did before entering teaching. Industry tries to hire them back.

E. They are active in one or more professional organizations.

F. They have a reputation for liking people and being patient.

G. Last but perhaps most important, in the early stages of development of a program they are able to speak the language of their subject with their peers. It is imperative that the instructor move with ease among the potential students, employers, and suppliers in his business. The success of each program can really only be measured by the demand for its graduates.

A carefully chosen faculty exhibiting those characteristics described above will do much toward establishing successful occupational programs. It might be added that in each must be this intangible desire to teach. Faculty who are industry's rejects do not work well in the college class and laboratory. With a vocational technical faculty comes the basis for either success or failure in recruiting efforts.

Programs

Reasons for choosing a particular program of study in an occupational area vary significantly. There is, however, an apparent common desire among vocational technical students to learn those subjects directly related to the business at hand. This attitude needs to be considered in the development of curricula. Collegiate integrity or the meaning of the diploma or degree can, in many cases, be in opposition to what the student believes he should have or what he wants to learn. Our strategy has been to develop curricula in line with the accepted standards of professional organizations and associations external to the world of education but related to the occupations. Guidelines provided by these organizations can be worked into series of courses which, if all successfully completed, will lead to a degree.

A way of meeting the varied requirements of occupational students is to develop courses and programs which can be taken one at a time and if enough of the right courses are successfully completed over some period of time, award the student a degree or diploma. A formula which has been used as a guide is as follows:

A. One subject studies. This might be offered day or night and can be a part of a degree or diploma program. If desirable, a certificate of attainment can be awarded to those successfully completing the program.

B. Diploma programs. These can vary in length but a good rule of thumb can be Veterans Administration requirements. Diploma programs are characterized by 90% of the time being spent in learning the skills of the programs and 10% directly related material.

C. Degree programs. Vocational-technical degree programs can recruit students from among the better diploma and certificate programs. The rigorness of these programs

is high but the emphasis is on the immediate use of the principles of the subject. About 75% of the studies deal with the major subject and about 25% with related material. Degree programs require a minimum of 60 semester hours for graduation.

Trade and craft unions have been extremely interested in training courses for their members. Recruiting for degree and diploma programs can be greatly enhanced by providing training programs which satisfy the educational programs of unions. If this path is chosen, it is important to rely on their expertise. Instructors can be located and in many cases, the course materials provided by the union seeking instruction. Awarding a certificate of attainment goes far with craftsmen to encourage them to pursue more advanced training. Although courses arranged for a special group may lead only to a certificate, these are extremely important in spreading the word about the quality of instruction, co-operativeness of the college, its equipment, and often the availability of instruction in other occupational subjects.

Equipment

There is perhaps no group of people more conscious of change in our technological world than those in industry. "Bread board" computer technology is out. Gas welding is becoming a thing of the past. Industrial design relies more and more on the answers supplied by the analog computer. As each is superseded by advanced equipment the demand for trained personnel intensifies. Good, up-to-date equipment will attract students. The word gets out that your institution offers instruction in the latest industrial money saving equipment and your admissions phones never cool. Industry is motivated to earn money and, of course, invests great sums in equipment to help them in this goal. Incentives to workers in industry are provided for those who know how to operate the latest equipment. Each college desiring to be successful in getting students into their occupational programs must be prepared to be ahead of industry with the equipment in their shops and laboratories.

Equipping a vocational-technical program is an expensive venture. To ease somewhat the squeeze on funds it has been found possible to acquire equipment over a period of time after a program has started as long as the timing coincides with the instructor's teaching schedule. The really important aspect of equipment is that sufficient funds are budgeted to purchase it and it is the type that is normally found in the lab, shops, or office.

It is commonly held in education circles that a piece of equipment which teaches the principle underlying some process will prepare a student to adapt this information to a wide variety of cases where the principle has been applied. Perhaps educationally sound, but it doesn't seem to attract students. Students in vocational subjects expect to

learn on the equipment which they will find in business or industry. Equipment budgets must reflect the changes taking place in industry and provide training which prepares students to enter into positions which are profitable to industry.

Summary

Pragmatists are often accused of justifying any means as good if it works. This paper is a bit pragmatic and possibly somewhat iconoclastic. The content is based on experience in one new community college which has from its inception consistently attracted a majority of its students into programs of studies usually described as "vocational-technical". It would be grossly unfair to say that the ideas presented here were original with the author. Rather, the ideas and studies of a multitude of persons provided a platform for establishing a college by a group of people who are more inclined to putting ideas to work than discussion and study.

The Relevancy and Implementation of Career Planning Services

Gene F. Ventura
Director of Career Planning & Placement
South Campus, Community College of Allegheny County

"Where am I going and what will I find, what's in this grab bag that I call my mind?....Looking inside me; what do I see? Anger and hope and doubt, what am I all about...and where am I going?.....You tell me!

"Where Am I Going?"
from Sweet Charity

Although few who subscribe to current theories and philosophies concerning career planning would be bold enough to "tell" a student in search of a career objective and for self-identification the answers to the questions posed above, there is a growing trend among student-oriented post-secondary educators to provide specific professional assistance to help students arrive at these determinations through up-to-date counseling and career planning programs. Although almost all schools provide "counseling" services, few are providing specific and comprehensive career planning services. That the need to provide such services exists may be found in the statements of Dr. Lawrence Litwack and Dr. Ralph E. Prusok of Kent State University in their recent article.

Planning Your Career

"Students enter college for a wide variety of reasons, including parental expectations, hope of finding a marriage partner, escape from family or societal responsibilities, or postponement or escape from military obligations. However, by far the major single reason for seeking further education beyond high school is to acquire the skills and/or training necessary to enter the "world of work" at a higher level than would otherwise be possible."

"Prior to entrance, or soon thereafter, each student is faced with the problem of choosing a field of study leading to a career. This choice represents one of the most important life choices that will confront any individual. The difficulties of this choice can be seen from the fact that approximately 75 percent of all college students change their major field at least once; 50 percent of all college graduates end up working in career fields unrelated to their major in college; and the majority of students seeking help from college and university testing and counseling centers present problems revolving around educational choice and career planning."

"College freshman fall generally into one of two major groups: those who have already selected a major field and life goal, and those who have been unable to decide upon a major field or clear-cut occupational objective. Some of the group that has already selected a major will continue in their chosen field through graduation and begin a career. The others in this group will not be as fortunate. They begin to question the validity of their choice, and frequently end up displaying one of several symptoms:

1. They find themselves in academic difficulty and begin to question their ability to succeed in college.

2. They have great difficulty succeeding in courses directly related to their major field, and subsequently find themselves being encouraged or forced to change majors.

3. As they become more familiar with the characteristics of their career goal, they begin to realize that their expectations have been unrealistic and/or that the less desirable qualities of their career choice are too important for them to overlook.

The second group of students includes, generally, those who have difficulty in deciding upon a major field and career goal. The assumption has always been made that they would go on for further education after high school. Now that they are in college, they find themselves drifting aimlessly with no goal beyond that of obtaining a college degree. Many around them seem to have satisfactory objectives, but they don't know how or where to begin to select a major that will lead to a career goal that is right for them.

Both groups of students frequently end up changing from major to major in a haphazard search for the right field. Changes of major, if they are to be made, should be made as early as possible. Most students who make decisions to change late in their college years face a loss of time and credits due to different prerequisites often required in a field different from their original major. Thus, unless great certainty exists in major field and career goals, forcing and entering freshman to declare a major is probably unwise.

Many colleges realize this and try to assist through their general or liberal arts requirements. The variety of seemingly extraneous courses required by most liberal arts programs are designed to broadly educate the student by exposing him to the humanities and sciences. Such curricula also have the added advantage of allowing the student to "sample" fields

that may subsequently hold some career interest for him. For example, several courses in sociology may motivate the student to consider seriously the social service field as a possible career.

However, sooner or later, the time comes for each student to make a choice and establish at least a tentative career goal"

Much of the current career literature concerning career planning, which reflects both the formal research findings and on-the-job experiences of guidance and advisement professionals, echos what has been stated above. The assumption of the validity of such findings, in conjunction with their own experience and research findings, has led many students of career counseling to shift the emphasis of services they offer to students at their institutions from the more traditional and widely-practiced job placement oriented ones to those which assist students in arriving at meaningful decisions concerning the selection of a program of study and career objectives.

That the responsibility to provide such services rests with our institutions of higher education becomes rather evident. If it is true, and there is strong evidence to believe that it is, that 75 percent of all college students change their major field at least once, that 50 percent of all college graduates end up working in career fields unrelated to their major in college; and the majority of students seeking counseling assistance present problems revolving around educational choice and career planning; it is indicated that the assistance is not adequately being provided in the high schools, that if it is students are not taking advantage of it, and that the colleges have only a slightly better record.

If we in the colleges who have a critical developmental contact with students do not provide the vehicle, students will continue to flounder as the assistance is not likely to be provided elsewhere. We must certainly consider that the educational process extends beyond the threshold of the classroom, and that if the post-secondary educational experience is to be meaningful to our students we must be able, ready and willing to provide comprehensive services ministering to the totality of their being.

Determining The Need

Among the ways of determining whether or not a need to offer specific career planning services which are distinct from the more general "personal problem" counseling services exists at a given institution, one can formally or informally discuss the idea with students, counselors, faculty and administrators who have close contact with students. Review of data concerning course registration and program switching can provide meaningful information. Discussion of career objectives in freshmen orientation seminars can also be a fertile sampling ground. It is likely that the need will be manifest, and that the student-oriented administrator will discover a sense of urgency to implement such a program on a professional level with appropriate financial support.

Benefits to be Derived

Although it may not be immediately evident, a number of benefits may be derived by various groups within the institution if the career planning services program is successful. The most obvious group to benefit from participation in an effective program is that of students who are uncertain as to a possible college major or career objective. Individual students who arrive at a decision as to their objective are likely to have a new sense of direction and find relief from pressures resulting from their former indecision. These students are likely to find it easier to select their courses for future terms and that their academic performance is enhanced as a result of new-found motivation.

Those students who already have a "fairly good idea" as to their objectives may benefit from becoming more knowledgeable about the options within their chosen area and the alternate routes to be taken in the event the primary one becomes difficult or impassible.

Those administrators concerned with course offerings are likely to find a less difficult task in scheduling courses and projecting enrollment as a result of lessened indecision on the part of the students. The professional counseling staff is likely to find more time available to assist students with "personal problems" if fewer students with goal related problems seek their assistance. As a related duty, the Co-ordinator or Director of career planning services will have effected contacts with employers which are likely to provide a pipeline of information concerning the critical manpower needs of the community. This information can be effectively used in setting up new programs and altering or revising ones already in existence.

Suggested Program and Services

The following career planning and placement program is currently in operation at the South Campus of the Community College of Allegheny County. The program and services offered were designed to assist in providing most of the benefits previously cited. The program was designed around successful services being offered at a number of two year and four year institutions and suggestions offered by progressive practitioners in the field of career planning and placement. As the program has been in operation a short period of time, it is as yet too early to determine its' affect on providing the benefits intended.

Career Planning Services

The career planning program is designed to assist the student in determining a career field which is compatible with his or her interests and abilities.

Identification

Any student who is unsure of his career or vocational objectives, to include uncertainty as to a possible college major, should take advantage of the services offered by the Career P'anning and Placement Center.

Testing

The Center administers and interprets the Kuder Occupational Interest Survey for adults and college students which relates interests to occupations and a number of possible college majors.

Initial Counseling

Students are invited to discuss the results of the Kuder Survey with a qualified Career Advisor who will assist the student in determining selected occupational fields for further investigation through the review of concise and comprehensive career literature.

The Career Information Library

The Center maintains a comprehensive and current occupational information library. The information on hand is indexed for speedy location and is in brief form for easy reading. Some of the types of information in the library are:

2 - 3 page monographs on almost every occupation practiced in the United States. These include the nature of the work, types of employers who employ those trained or experienced in the occupation, the training or education normally required for entrance into the occupation, advancement opportunities and the employment outlook, earnings, and where to obtain additional information about careers in the occupation.

Extensive information about individual careers provided by professional and trade associations.

Information provided by individual employers concerning job opportunities and information about the employers' activities.

Indexes which identify all employers which are engaged in specific fields of endeavor.

A current and comprehensive collection of catalogs of colleges and universities to which South Campus students may transfer.

Definitive Counseling

After the student has become more knowledgeable about selected career fields and occupations, he is invited to participate in more definitive counseling which relates his skills, knowledges, abilities and interests to specific educational and occupational opportunities.

Job Placement Services

The Career Planning and Placement Center provides assistance to students and alumni seeking part-time, summer and permanent employment.

Some of the services provided are:

Assisting students in the planning of efficient and effective job searches.

Assisting students in identifying specific current job openings.

Assisting students in being proficient at writing effective and attractive resumes and letters of application for employment.

Assisting students in being effective interviewers.

Arranging for employers to conduct employment interviews on campus.

Career Seminars

Seminars in Career Planning

These seminars are programmed to assist students in conducting logical planning leading toward meaningful career or occupational decisions. They will feature presentations about various career fields by current practitioners, and will empnasize occupations related to South Campus programs.

Seminars in Seeking Employment

These seminars are directed toward assisting students to become efficient and effective in the mechanics of seeking employment as listed under "Job Placement Services". They will feature inclass demonstration interviews conducted by professional employment interviewers from local companies.

Personnel Needed

Once a committment is made to provide comprehensive career planning and placement services, it is critical that it be staffed with competent personnel. As they might appear on an organizational chart they are: The Director or Coordinator who will set up and administer the program. By nature of the position this person must not only be knowledgeable about career planning and placement, but must also have facility with administration of programs and people. Relative to knowledge of career planning, placement, job factors, etc., this person is most likely to be one who has had experience as a director or assistant director of a similar program, experience in interviewing and/or hiring for a wide range of occupations as an employment interviewer or personnel recruiter for a large employer, or experience as an employment counselor or placement specialist with a public or private employment agency. In addition to administrative duties, the director can effectively service those in need of career planning and placement assistance out of a group of approximately 600 students.

Assistant Directors or Coordinators. For each additional 800 students in the institution, it is ideal to have one additional professional staff member who is a qualified and competent career advisor. These additional staff members allow for needed personalization of services for individual students. In general, assistant directors should have had experience similar to that of the director.

Clerical Support Staff. In a new program with a limited professional staff, it is imperative that the clerical support staff be especially capable as the "professionals" will have little time to devote to clerical necessities. In addition to having above average mechanical skills, they must be able to perform assignments with a minimum of direction. In a situation where the director is the only professional (and must be a full-time career planning advisor, placement specialist, program planner and administrator) the minimum support staff should consist of a secretary/assistant with some administrative talents, and a clerk to maintain the career information library, recruiting schedules and interview appointment schedules.

Student Advisory Board. As assistants in providing and promoting the services of the career planning and placement center, it is highly desirable to form an "advisory" board of students. Their function is to analyze and evaluate programs and services as to their relevancy to the student body, to serve as a pipeline of information as to the needs of the student body, to arrange for and promote such activities as career fairs, and to otherwise assist in making the career planning and placement programs relevant to the publics they serve. As compensation for serving as a member of the board is not generally allowed, it is indicated to have the function officially recognized as a student activity.

Informing the Publics

Once the program is ready to serve clients, an aggressive promotion campaign should be mounted to inform the publics it is designed to serve of the assistance the career planning and placement center can provide. The primary thrust of the campaign should be designed to make students aware of the benefits to be derived through planning their futures and of the services provided by the career planning and placement center. At South Campus, the most effective method of doing this has been through presentations on career planning in freshmen orientation sessions and in freshmen seminars. Articles about career planning in the student newspaper and bulletin board posters have also been useful.

As faculty often serve as advisors, it is imperative that they become knowledgeable about career planning to enable them to assist students and refer them to the career planning and placement center when indicated. Presentations at faculty orientation and providing each faculty member with a "career planning and placement information kit" have been successful at South Campus.

As an important source of information about job requirements and job openings, employers in the area served by the institution must be informed of the services being provided and asked to provide information and other assistance needed to make the services effective. The initial contact can be made through providing the school's catalog to the employment department of the hiring company or agency, with information as to the availability of students and graduates for permanent, temporary and part-time employment. For obvious reasons, those in administrative positions within the institution must be continually informed of the progress of the programs and services.

Support Needed from the College Administration

To insure the success of the career planning and placement program, it is required that utmost support and consideration be provided by the administrative officers of the institution. The three areas where this support and consideration is most needed and critical are budget, facilities and time. Relative to financial support it is imperative for the director of the program to know approximately what monies are available for the program so that priorities may be set.

Physical facilities should provide, 1. A location which is in a traffic pattern heavily and frequently traveled by students, 2. Individual and private offices for the director and each assistant, 3. Adequate space for a combination career information library and reading room, 4. Interviewing facilities in the form of private rooms which can also double as testing rooms, 5. Extensive wall space for bulletin boards, 6. A recruiter's lounge area if recruiting activity is extensive, and 7. Adequate space to store career literature, other brochures and booklets and supplies. In general, as the career planning and placement center is often the "front door" of the institution for employers and

others of the general public, the facilities should be as attractive and comfortable as is financially possible.

Relative to time, and dependent upon the size of the staff, those concerned with career planning and placement must be given adequate time to concentrate on their specific functional area if the program is to become and continue to be effective. All other considerations concerning the "happiness, care and feeding of staff members" also applies to those in the career planning and placement function.

Cooperative Work Experience

William R. Ferencz, Division Chairman
Business and Management Services Division
Harrisburg Area Community College

Relevant education programs are being demanded by our present generation of students in the junior and community colleges, as well as four-year colleges and universities. Minority groups are contributing weight and impact for change in existing educational patterns of educational institutions and the employment practices of business and industry. College populations are also changing as a result of the affluent society, increasing awareness of the need for additional education, availability of facilities, financing by governmental agencies and the impact of the draft system. The expanding student population brings with it a greater diversity of abilities and educational objectives. Business and industry are also demanding more highly skilled and better educated employees. These have resulted from the technological advances of modern industry. Ample evidence to support the above statements is constantly bombarding each of us through the daily news media, periodicals and the literature of our times.

Cooperative education, although very relevant to the present educational needs, cannot be considered a product of the "space age." This concept of education has been with us since early times. Apprentices have served the skilled artists, craftsmen and the like for centuries. Even now, the professions make use of the internship as a vital part of the educational pattern for the licensing of certified public accountants, physicians, and teachers. These experiences appear to be totally accepted as relevant educational practices by the students, governmental agencies, colleges and universities.

There are more than one hundred fifteen colleges and universities and approximately fifteen percent of the junior colleges that offer cooperative education as a part of their curricula. The need to triple the number of schools offering this type of program in the next two years has been stressed recently.(1:9)

Cooperative Education Defined

The National Conference on Cooperative Education used the following definition:

> "'Cooperative vocational education program' means a cooperative work-study program of vocational education for persons who, through a cooperative arrangement between the school and employers, receive instruction, including required academic courses and related vocational instruction by the

> alternation of study in school with a job in any occupational field, but these two experiences must be planned and supervised by the school and employers so that each contributes to the student's education and to his employability. Work periods and school attendance may be on alternate half-days, full-days, weeks, or other periods of time in fulfilling the cooperative vocational education work-study program." (2:13)

The important elements listed in the definition are the students, the employers, and the school. Also important, are the requirements that jobs must be related to the student's aspirations in order for the experience to be relevant to the occupational career objective; the planning of the experiences on the job must be jointly developed between the employer and the college representative in order to assure objectives will be accomplished under proper supervision; and the program of courses offered at the college should be constructed with the advice of a college curriculum advisory committee to enhance future employability of the graduates completing the career programs.

What Programs in the Community College Should Incorporate Work Experience in the Curriculum?

It would appear as though all career programs should consider the possibility of cooperative work experience. In order to determine the feasibility of such programs, it would be desirable to confer with advisory groups. They would be able to indicate problems connected with employers in these areas. Some employers have restraints stemming from union contracts which would not allow cooperative work experience individuals to work part-time. However, we might be overlooking potential employers of cooperative work experience students if we do not check on part-time employment which prevails within the community college service area. For instance, Douglas W. Burris, of the American Association of Junior Colleges, reveals (3:52):

> "It is also interesting to note that recent surveys have shown that at the community-junior college as many as 40 to 60 percent of the students are working part-time; but of major interest here is the fact that, in many instances, up to 80 percent of these students have been working at part-time jobs completely unrelated to their formal college program."

The implications of getting students involved in job experiences related to their occupational career objectives become more important as you view your college students and the types of part-time employment they undertake while in school. The types of jobs currently held by students should indicate where additional programs could be developed

in many more fields. Mr. Harry Huffman depicts seven categories of cooperative programs presently being offered. They include programs in business, distributive services, home economics, trade and industry, agriculture-business, related programs, and special purpose programs. (4:52) It can be visualized that there is flexibility in the types of programs fitting cooperative education in the community college.

Advantages and Disadvantages of Cooperative Work Experience

The question has often been asked as to the advantages of cooperative work experience programs. A listing of the values of such programs to employers, students, the college and the community, has been developed by Max McDonald, of the Los Rios Junior College District in California:

"Benefits to the student

1. Gains knowledge and attitudes necessary for successful performance
2. Learn how to get along with co-workers and employers
3. Develops personality and poise, and acquires good work habits
4. Explores the field in which he feels his vocational interest lies and determines whether or not it is a suitable field for him
5. Broadens his understanding of the occupational world and of working conditions in the world of work
6. Develops an appreciation and understanding of the relationship between formal education and job success
7. Augments the financial resources of the student and assists him to remain in school.

Benefits to the employer

1. Provides the employer with carefully selected, part-time help who may become permanent at a later date
2. Provides an opportunity for the employer to train possible future employees by use of the methods that he has found to be most satisfactory for his operation
3. Provides the employer with employees who are receiving additional training through related instruction at school
4. Serves as a training program for prospective employees of small businesses or industries that are unable to conduct extensive training programs within their own establishments
5. Reduces turnover because the employees have become adjusted to the job before they accept full-time employment.

Benefits to the college

1. Provides an opportunity for the college to relate academic training to job requirements
2. Utilizes many community facilities and resources for training purposes, thus making it possible for the college to provide training in fields that the college program could otherwise not serve
3. Increases the college's ability to hold students in school for a longer period of time
4. Provides assistance in occupational guidance
5. Enables the college to keep abreast of developments in the business and industrial world
6. Provides a direct avenue through which the college can meet community needs
7. Develops good college-community relations
8. Acquaints employers with the work that young people trained in the junior college can perform
9. Provides a way to meet student occupational training needs.

Benefits to the community

1. Provides the community with an increased source of well-trained workers
2. Provides the community with a labor force that is more thoroughly and efficiently trained and, hence, works more efficiently
3. Increases cooperation between the community and the college
4. Increases the possibility that young people will remain in the community after graduation, since they already will have found a place in community life." (5:53)

The benefits listed above are multi-dimensional. They bring together many facets of the community for the common purpose of educating youth and adults for the world of work.

Success, however, cannot be achieved unless all of these elements work together cohesively. Joint planning is an important ingredient to success. It calls for full cooperation of the employers involved. Suitable work must be made available to allow the trainee to develop competency in the various areas of the job. Employers must be willing to provide work activities which allow for mobility and decision-making by trainees.

Employers, or supervising personnel working with students, must be carefully selected and willing to take an interest in academic activities of the student. Student participants, on the other hand, must be equipped with a basic knowledge of skills for the area in which they are to work prior to being placed in work stations. These trainees should become

aware of the types of behavioral attitudes, work skills, initiative and performance expected of them.

Coordinators should be alerted by the trainees' supervisor of progress being made. They should visit and observe students at their work stations. Meetings with supervisory personnel should be scheduled for evaluations and suggestions concerning the trainees development on the job. Seminars with students should take place concurrently with their cooperative experience to assist them with problems on the job and to inform students of changes taking place in their career field.

Criteria for evaluating students during their cooperative work experience should be stated explicitly. Behavioral objectives should be defined so that all parties involved understand the evaluation is based on their achievement. If this is not done, the evaluation process will not be valid. Extensive work remains to be done in setting up reliable, objective instruments.

When Should Cooperative Work Experience Be Scheduled?

Cooperative work experience should be scheduled to provide the student with the final polish needed for entrance into the world of work. Usually the last semester or the entire last year of the student's program is the preferred time for the cooperative education sequence to take place. However, it is possible to have cooperative work experience throughout the entire period of the student's education in the junior-community college program. An example of this type of venture is the Career Advancement Program in existence at the Rock Valley Community College.

The explanation for the Rock Valley approach is to allow the students to work yearlong and not interrupt their work experience. The companies do not have semester breaks and are relying on these employees, with their developing skills, as a vital part of their work force. The companies in this case requested cooperation from the community college because the supply of young technicians in the area was dwindling. The advertising was done by the business and industrial firms to encourage students to earn while they go to college. The jobs were set up as real learning laboratories.

Other programs lend themselves better to summer work experience scheduling. An illustration of this type of program is evidenced in the Hospitality Food Service Management Program offered at the Harrisburg Area Community College. The rationale for this summer program is the availability of jobs resulting from the seasonal increase of the food service industry. It is also necessary for students to be extended over a wider geographical area making half-day programs unavailable. Attrition rates for these individuals tend to be greatly reduced because the trainees are constantly in touch with the coordinator.

The Retail Cooperative Program at Harrisburg Area Community College is set up so that students may take their cooperative work experience during regular semester or during the summer. This allows a greater flexibility in scheduling each student and offers continuity to the program for employers. The summer segment of the retail cooperative work experience program provides opportunities which are not usually available at other times of the year. Since the trainee is available to work a forty-hour week, certain business establishments utilize their trainees as management assistants. Greater responsibilities are delegated to the trainees as they assume the duties of vacationing employees. Students have gained very rewarding experiences during all phases of their cooperative education.

Another plan of work experience scheduling exists at the Mohawk Valley Community College (Utica, New York). The student must spend one quarter during each of the two years at the college gaining cooperative work experience. Each institution can explore the pattern best suited to the needs of students served. No particular pattern lends itself to all curricula or colleges.

Problems of Cooperative Work Experience

Developing a cooperative work experience program causes the coordinator to realistically face certain problems. Traditionally, oriented faculty members seriously question the granting of credit for "work experience." Once the credit hour obstacle has been overcome, work stations must be made available. As previously mentioned, advisory committees can assist in "breaking the ice" for the placement of students in trainee stations. The final placement is an individual matter with each employer. However, employers must also be convinced of the work experience concept. Many employers have not been accustomed to using semi-professional workers on a part-time arrangement and a convincing sales job must be done to show the merits of this concept.

Employers also have their peculiar problem. For instance, when the Harrisburg Area Community College was attempting to set up a cooperative work experience segment for the secretarial science curriculum, no advisory committee existed. The local Chamber of Commerce was the vehicle used to present the proposed program. Interested businessmen indicating their desire to participate in the new program were approached and the program was again explained. Each business indicated the number of probable work experience stations they would be able to generate and it appeared as though the program was operational. Surprises were in store for the coordinator when calls were made to place the students: budgets had not been established, and red tape in internal structure had not been cut. The personnel directors did not have the final say in such placement. As a result of very enthusiastic and energetic last minute salesmanship by the coordinator, the program got under way with all students placed. Since that time, the employers have enthusiastically supported the program.

Some students will not function well in a particular cooperative work experience location. Good rapport with the trainee's supervisor is essential in overcoming obstacles. Information concerning bad attitudes, poor work performance, and weaknesses of the trainee should be reported immediately to the coordinator by the supervisor. If the situation cannot be remedied, arrangements should be made to withdraw the trainee from the cooperative experience. Neither the student nor the employer should be burdened with unsuitable situations.

Success Breeds Success

Cooperative work experience is relevant to the needs of students preparing for the world of work today. Students usually continue employment where they have had favorable experiences upon receiving their associate degree. Between 50 and 85 percent of the students of the various career programs encompassing the work experience concept have taken full time employment with cooperating employers. Many more have had offers from these firms but had other offers or desired to work where greater opportunities prevailed in other locations.

Semi-professional positions in the business and management services fields are well suited for cooperative education. Technical areas are equally suited to cooperative work experience programs. Creative educators responsible for the technical programs in some two-year post-secondary institutions have implemented such cooperative education programs.

There appears to be a demand for better educated, more highly skilled technicians to meet the changing needs of business, government and industry. There is also the belief that the commitment of the public two-year colleges is to provide educational programs for all post-secondary age citizens who have the abilities to benefit from such experiences according to Blocker, Plummer, and Richardson. (6:269) This assumption is predicated on the concept that programs can be designed to meet changing societal needs.

Bethel (7:117) is optimistic in his opinion that vocational education is dynamically a feature of the public community college and that these institutions may be able to plan the most appropriate programs to meet the needs of the communities for full-time as well as part-time vocational education.

It would appear as though the challenge to post-secondary educators is to meet the need for the development of the citizens of the community which would improve their competencies and equalize their employment opportunities for the present and the future. One way of meeting this challenge is to provide relevant programs of learning which include cooperative work experience courses.

References

1. The Honorable Roman S. Pucinski, "Congressional Expectations of Cooperative Vocational Education," Remarks before the National Conference on Cooperative Vocational Education, Minneapolis, Minnesota, February 26, 1969 (Notes and Working Papers from The National Conference on Cooperative Vocational Education, Implications of the 1968 Amendments), p. 9.

2. Notes and Working Papers from The National Conference on Cooperative Vocational Education, Implications of the 1968 Amendments, Conducted by the University of Minnesota, February 26, 1969, p. 13.

3. Douglas, W. Burris, "Co-opportunity for Meaningful Learning Experiences," National Business Education Quarterly (Winter 1967-68), p. 52.

4. Harry Huffman, "Cooperative Vocational Education Unique Among Learned Work Programs," American Vocational Journal (May, 1969), p. 52.

5. Op. cit., p. 53.

6. Blocker, Clyde E.; Plummer, Robert H.; and Richardson, Richard C., Jr., The Two-Year College: A Social Synthesis Englewood: Prentice Hall, Inc., 1965, p. 269.

7. Bethel, Lawrence L., "Vocational Education," The Public Junior College, Fifty-Fifth Yearbook of the National Society for the Study of Education (Chicago: University of Chicago Press), p. 117.

Introduction: The Role of Guidance in Student Diagnosis and Curriculum Choice

George W. Elison, Dean of Technologies
Lehigh County Community College

The Master Plan for Higher Education in Pennsylvania was developed by the State Board of Education to insure that institutions of higher education in the Commonwealth will accomplish the following:

1. Provide a wide variety of higher education programs to serve the diversity of talents and interests of the people of Pennsylvania.

2. Meet the needs of the Commonwealth for educated people with a wide range of competencies.

Within this framework, the development of a wide range of occupational education programs is encouraged. (1)

One of the major obstacles confronting institutions of higher education in preparing people with a wide range of competencies is the matter of recruitment, diagnosis, assignment and retention of students. Herein lies one of the major challenges to guidance departments and admissions offices. The identification of expanding occupations is fairly simple. The matching of students to these employment opportunities is another matter.

Dr. Norman C. Harris, in a paper prepared for the Occupational Education Program Development Institutes, conducted by the American Association of Junior Colleges and the Ohio State University in the summer of 1969, cites the crux of the student recruitment problem of being a matter of matching "ability index" with "need index" and "prestige index". (2)

What role should guidance departments play in aiding prospective students to match their abilities with employment opportunities and thus make it possible for the community college to meet the needs of the Commonwealth for educated people with a wide range of competencies?

Our panelists, having different backgrounds and occupying different positions, will bring different ideas to us. Robert Gebhardtsbauer, Dean of Student Affairs at the Lehigh County Community College, will consider the broad functions of guidance as they relate to admissions. His presentation will be tempered by several years experience with the admissions policies of a state university. Robert Hontz, our second speaker, will discuss the role of guidance as seen by a counselor at the Williamsport Area Community College, one of the community colleges

which offers a wide selection of occupational courses. Mr. Hontz has had several years experience as a counselor for high school students who are seeking placement in vocational and technical education programs.

Our third panelist, John Rebert, Coordinator of Vocational Guidance, Pennsylvania Department of Education, will consider the role of guidance in carrying out the responsibilities for preparing educated people with a wide range of competencies, as proposed in the Master Plan for Higher Education.

References

1. Pennsylvania State Board of Education, A Master Plan for Higher Education in Pennsylvania, Commonwealth of Pennsylvania, Harrisburg, 1967.

2. Harris, Norman C., Identifying New and Emerging Occupations, American Association of Junior Colleges, Washington, D.C., 1969.

The Place and Purpose of Vocational Guidance in an Educational Setting

John A. Rebert, Bureau of Pupil Personnel Services
Pennsylvania Dept. of Education

Introduction

In improving and extending programs of occupational and vocational education, it is recognized that vocational guidance has been assigned a vital role. While such a statement seemingly lends stature to this student service, many misconceptions about its place and purpose have evolved through an acceptance of the superficiality of the words themselves.

Exploration of the topical issue must be cast within the totality of the educational continuum. In an effort to clarify the position and function of vocational guidance, then, the subject will be viewed as to its appropriateness to the K-14 educational levels and beyond rather than to a specific study of its application solely to a community college setting. However, implications will be cited for the community college educator in keeping with the conference theme.

Vocational Guidance: An Integral Part of Comprehensive Guidance Services

The aim of vocational guidance as formulated by the National Vocational Guidance Association in the 1920's was "to assist the individual to choose, prepare for, enter upon, and progress in a vocation (1)." As recently as the writing of the Vocational Education Amendments of 1968, (2) the emphasis of vocational guidance as an inherent function of vocational and occupational education focused upon man's success as measured by societal pressures of worker productivity, rather than toward worker adjustment and satisfaction. For far too long the function of vocational guidance has been aligned in this manner with the trait-factor theory (matching people with jobs), as conceived and practiced by Parsons (3) more than 60 years ago, serving as the focal point of vocational guidance efforts.

As a consequence of the emphasis through the years upon provision of a guidance service which purports to predict successful worker productivity through matching individual abilities with job expectations, vocational guidance has become isolated from all other guidance and counseling components. This common misconception, as it exists in many quarters, causes a deterioration in the effectiveness of this service at all educational levels. Hoyt (4) states that if counselors are to work together, a unitary concept of guidance must prevail; not vocational guidance and regular guidance. Vocational (occupational) education is part of the total curriculum, and therefore, there should be only one guidance program. No single curricular segment of the student population

deserves more guidance than any other segment. Students must be given equal priority and not segregated by curricular programs. The intent, then, is to strengthen weak aspects of guidance programming rather than isolate vocational guidance from related functions.

Vocational Guidance and Vocational Development:

The contributions of the behavioral and social scientists in studying man at work during the past 20 years have resulted in new and improved career development theories. Because of these efforts a new definition of vocational guidance emerged providing a basis for expanding these services in meeting individual needs. Super (5) through his research in vocational development proposed the following expanded definition:

> Vocational guidance is the process of helping a person to develop and accept an integrated and adequate picture of himself and of his role in the world of work, to test his concept against reality, and to convert it into reality, with satisfaction to himself and benefit to society.

From such a definition the orientation of vocational guidance and counseling shifts from one which emphasizes worker productivity to one of facilitating a compatibility between job expectations and a worker's developmental needs.

Thompson (6) states that when vocational guidance is viewed in this manner within the school setting, two factors are considered: (1) the broadening of the term "vocational" over the years to include the many kinds of behaviors relevant to the ultimate development of a satisfactory and satisfied worker in our society, and (2) the continuing need to provide systematically for those aspects of the total guidance program which have to do directly and explicitly with the individual's vocational development.

Acceptance of such a philosophical base of delivering vocational guidance services within a personal development framework directs the counselor's efforts toward vocational development as a life-long process rather than toward the designing of programs which center solely upon critical decision points, i.e., curriculum choice points and job placement.

The choice of an occupation or a curriculum which is planned to prepare an individual is stating rather specifically his concept of self. Upon entering the job, the individual is testing his self-concept against reality; and, hopefully, will find his choice both satisfactory to himself and society.

Such a position dictates the regard for unique individual differences as the client progresses through vocational development stages. The counselor's guideline revolves about "change" rather than descriptions of people and their predicted "fit" in the world of work. A guidance service which is compartmentalized and fragmented can not meet the needs of the individual within this frame of reference. All aspects of a comprehensive guidance program must be utilized to assist the counselee with his vocational and personal development. Vocational development within this model becomes an integral part of total development. The processes by which individuals make career decisions are interwoven just as closely with developmental-task growth and maturity as in any phase of the more readily observable physical development.

Wrenn (7) recommends that primary emphasis in counseling students be placed on the developmental needs and decision points in the lives of the total range of students rather than upon the remedial needs and crisis points in the lives of a few students, with the major goal of counseling being that of increased self-responsibility and an increased maturity in decision making on the part of the student.

While the modern theories and approaches of vocational development broaden the mode of operation for the counseling practitioner, much of the counseling for career decision-making done today focuses upon inventorying or appraising the individual, providing sketchy occupational information, and attempting to match the students' abilities with job expectations. Such methodology, of course, perpetuates the actuarial approach of fitting the worker to the job, which continues to be fostered through misunderstanding and mishandling of those services which fall within the realm of the vocational aspects of guidance.

A Developmental Approach to Guidance

But what is the solution? How can these services be rendered in a manner consistent with the broader concept of vocational development and still meet the needs of society in a technological age?

It may be helpful to differentiate crisis-oriented programs from those which emerge from a developmental context. In the former case, intervention takes place when children's lives are in a state of change or turmoil, e.g., at critical choice points such as the time of selecting a senior high school curriculum, a course of study at the community college or four-year college, or entry into the job market.

Matthews (8) states that during periods of imminent choice, change, or decision-making, the human being may be least accessible to learning new ways of understanding self and of learning to deal with life more constructively--a symbolic analogy is: it is hard to study peace in time of war.

Developmental guidance, on the other hand, would utilize periods of nonstress to build strengths upon which the individual can draw in times of stress, in effect, to capitalize on the calm that precedes and follows each storm.

A lifelong process, developmental guidance recognizes the unique possibilities for effective growth in all periods of life. Diametrically opposed to an emphasis upon problems, conflicts inadequacies, and limitations, developmental guidance regards human personality "in terms of a largely healthy interaction between the growing organism and the culture or environment (and that) development is a reasonably ordered and patterned process of change moving in directions that are typically desirable for both the individual and society."(9)

It is an established fact that children will grow, develop, and change with or without intervention from an organized program of guidance services. However, with purposeful intervention geared to the developmental level of the child (rather than his problems and weaknesses) such growth and change can be guided in positive directions. It is obvious, then, that developmental guidance must focus on accrued strengths and emphasize a gradual and desirable unfolding of human potentiality.

In undertaking the task of initiating and/or expanding guidance services within a developmental context, it is of fundamental importance to recognize the inextricable relationship among all aspects of human development. In this way, the child is viewed as a learner in both the intellectual and psychosocial sense. To focus upon intellectual development, for example, while virtually ignoring psychosocial development, it now recognized as tantamount to retarding the growth of both.

Any guidance program, therefore, which proposes to operationalize a developmental approach must address concurrently all aspects of the individual's development, not vocational development alone through fragmented services. A synthesis of the most recent pertinent literature reveals unanimity in acceptance of the premise that career development is integral to total development in its broadest and most appropriate conceptualization.

A Frame of Reference for Developmental Guidance*

The perspective in which such a program is cast is one of change. The aspects of the model--self, environment, decision/action--interacting with each other, as a "means-end chain" are all set within a context of change.

It has been said that we exist in a world in which the only constant may be change itself. Growth is change; development means change; maturation implies change. Environmental change, here, is also a positive

* Extract from a proposal for a developmental guidance project prepared by Dr. Kathryn A. Glenn, Pennsylvania Department of Education, Harrisburg, Pennsylvania, 1969.

construct one to be harnassed and used to best advantage. It is not a constricting, threat-producing, immobilizing force against which one must struggle to survive. Although we must acknowledge the limited control potential over the changes taking place in one's life, it is this very potential limited as it may be, which the developmental guidance program aims to have each student realize.

The major goal deals with the creation of an optimal climate for student growth. Such a climate is characterized by freedom to express oneself and to interact with others, both peers and adults, without many of the restrictions typically imposed in an institutional setting such as the school. It is assumed that if students are allowed and encouraged to be themselves without criticism or condemnation, they will be free to relate themselves to change that is at work within them and within their environment.

Another aspect of this type of climate takes into account other environmental factors impinging upon the student. Thus as significant adults (parents, teachers, administrators) understand and involve themselves in the process of facilitating the students' learning and development, the climate which is being sought will become more pervasive, thereby affecting all activities in which the student is engaged. (10)

Implications for the Counselor

While there is little likelihood of disagreement with the basic premise of a developmental approach to guidance, the practitioner waits on the sidelines with the all-important question, "How can these base factors be translated into practice?" And it is to this query that the remainder of this presentation will address itself.

Ivey and Morill (11) suggest that there is need for more awareness of change in vocational life than has been afforded through traditional vocational guidance practice. These writers present the concept of "career process," to replace "vocational choice," which is an attempt to stress the continual changes and the varied developmental tasks in occupational life.

The concept of developmental stages, as articulated by Havighurst (12) and the tasks which all persons must master within each developmental stage, can provide the framework from which the counselor can design materials and activities to be used in group or individual counseling sessions. Considering the concept of developmental stages, the counselor can readily grasp the process nature by which individuals grow in a progressive manner. Developmental stages are a gross way of looking at group development or what might be expected of the "typical" student at given levels. However, it is quickly recognized that all students are not "typical," nor need they be, particularly if the counselor accepts the important commitment to the development of individuality. Therefore, it is found that some students have developed faster than

others; some developed at a relatively smooth pace, while others developed by "fits and starts." The idea is that developmental mastery, in unique ways, is a prerequisite for long-term effective development. The recognition of individual differences among rates and styles of development is not to suggest that the goal is to have all move in the same way and at the same rate.

The counselor in assisting the students in the "career process" must view the client as a changing organism engaged in a series of career-oriented developmental tasks that enables him to adapt himself to a changing society.

To establish a meaningful translation of the aforementioned points of view on the place and purpose of vocational guidance for the practitioner's setting, the following case examples of "career process" counseling are quoted from the work of Ivey and Morrill published in the March, 1968 issue of the Personnel and Guidance Journal:

> Case 1. What shall my major be? An attractive freshman girl entered the office saying she didn't know whether she should major in English or art. It was obvious she was under a great deal of tension and soon she was in tears. After some discussion back and forth, she then asked that the tape recorder be turned off. The remainder of the interview seemed to lack direction, but the counselor sensed that the girl was doing what was expected of her rather than what she really desired.
>
> She came to the second interview dressed "to the hilt," commented that the counselor could use the recorder, and immediately launched into an analysis of her vocational choice difficulties. Sensing something artificial in the situation, the counselor noted that she seemed uncomfortable and later noted to her that she was especially well dressed. She replied, "I always wear earrings when I want to feel safe." She then recognized that she had been playing a role in counseling--that of being the "good" counselee. The remainder of this and subsequent interviews were centered around her desire to please her parents and do what they wanted, although in the process she was pleasing neither them nor herself.
>
> Analysis revealed that this girl had seldom given any thought to herself and her desires for work or accomplishment. Rather, she had done what had been expected of her--much like her desire to play the "good client" role. She also made a strong attempt to get the counselor to decide what she ought to do. The counselor met this with interpretation and supported any attempts on her part to "be herself."
>
> By the fourth interview, she had made considerable progress and seemed aware that she was responsible for her vocational choice and that she would not really be satisfied if someone

else made it for her. Her comment as she concluded sounseling was, "I still don't know what I want to major in. But somehow it doesn't seem as important now. I'm just going to be myself and I'll find me."

In this case, the interaction with the counselor can be seen as a critical developmental task. The developmental task led to two changes that can be readily identified. The student began to take responsibility for her own career process, and began to see herself, her interests, and her values as important in that process. She also became aware that choosing a major, or choosing an occupation, is not a fixed end point toward which she must move, but that the career process is very much part of "being myself," a process of self-exploration and actualization.

A more traditional approach might have given this girl a specific choice of major, but would not have prepared her for life process. The next steps, as the girl develops the ability to make decisions and greater awareness of her own values and goals, might center around two areas. One would be to provide developmental tasks to help her continue this growth. Individual or group counseling centering on awareness of self and others might provide such tasks. However, the social and intellectual interactions of college life might also meet her needs. The second step might be to help her see her future life as a series of developmental tasks and to aid her in learning how to select appropriate and meaningful tasks for future growth, although this outcome is already implicit in what she has learned.

Case 2. I'm flunking out. A freshman male doing very poorly in academic work came in to discuss choice of major and study habits. Before the first interview was over, a great deal of hostility toward authority figures, particularly his father, emerged. For example, he discussed the fact that he read slowly and then would immediately comment heatedly about the fact that his father had always pressed him to read and that reading was not enjoyable.

As counseling developed, a central theme of desire for accomplishment and attaining goals was revealed. This student gave as his reasons for attending college, "I want to get a degree." Life was seen as a set of challenges and specific goals, only temporary satisfaction, for always another goal faced him. The result was that he had alternately given up or tried harder. The constant change in approach had resulted in a completely ineffective student.

> Counseling in this case centered around his desire for achievement coupled with his attitudes toward his father and an attempt to find out what the boy himself wanted. His choice of physics as a major was revealed to be one in which he hoped to become more successful than his father. However, his failure to resolve an earlier dilemma can be seen as a developmental task that was not successfully utilized for growth. He needs developmental tasks that will lead to the necessary growth.
>
> The boy represents a rather typical situation encountered in career process counseling. It appears that many American youth have pragmatic goals, such as getting grades, graduating from high school or college, getting a job, getting married, etc. They move from goal to goal without any understanding of the underlying process. In a severe situation, it may be that analytic therapy would be seen as an appropriate developmental task. In another case, dealing with self-concepts in counseling, living independently, and dealing with teachers and other authority figures as an adult might be the necessary and sufficient developmental tasks. It is believed that the developmental task of realizing that occupation is not an end-point ties in with the more general mental health concept that the process of living is as important as the product of life. (13)

As indicated at the outset, the coverage of the topic of necessity had to encompass all educational levels and beyond. The students found in the occupational education curriculum at a community college are in many ways similar to those of the high school group who are planning to work immediately after high school graduation. Decisions which were postponed while in high school are expected to become more explicit, however, during the 13th and 14th years of educational pursuit. Materials and activities used by the counselor in assisting the student at the community college level are built around identical concepts as at any other educational level--those of self, environment, decision within a context of change. While decision-making in kindergarten may deal with the selection of toys or playmates, in the community college it may deal with the selection of educational and occupational alternatives. Thoroman (14) speaks of the wide variety of counselees at the junior (community) college level and discusses the counselor's responsibilities at that educational point as "being practically all things to all people." As the counselor assists the 18 year olds, the veterans, the older women who intend to return to the labor market via advanced education, or the person returning to school for retraining in an occupational education curriculum, it would appear that his task would become an easier and more systematic endeavor through incorporation of a developmental "career process" based on an understanding and stress of developmental stages and tasks necessary for personal growth that are related to occupational life.

No one can deny the legitimacy of the objectives of meeting the nation's manpower needs through utilization of man's productivity potential. But this is not to agree that it should be done with disregard for the individual's values or freedom of choice.

From very early in life, the learner is confronted with alternatives, and his growth and development are circularly involved with the decision-making process. What he chooses at a given point is influenced by and will influence in turn what he is.

References:

1. National Vocational Guidance Association. Principles and practices in vocational guidance. Occupations, 1937, 15, 772-778.

2. United States 90th Congress, P.L. 90-576. U.S. Government Printing Office, Washington, 1968.

3. Parsons, F. Choosing a vocation. Boston: Houghton Mifflin Co., 1909.

4. Hoyt, K. Freedom to choose. Guidance news and views in Virginia, 1969, 16(1), 3-5.

5. Super, L. D. The psychology of careers. New York: Harper & Brothers, 1957.

6. Thompson, A. School settings for vocational guidance. In H. Borow (Ed.), Man in a world at work. Boston: Houghton Mifflin Co., 1964.

7. Wrenn, C. G. The counselor in a changing world. Washington: APGA, 1962.

8. Matthews, E. Developmental Counseling. Primary school through university. Paper presented at the meeting of the American Personnel and Guidance Association, Las Vegas, April, 1969.

9. Blocher, D. Developmental counseling. New York: Ronald Press, 1966.

10. Glenn, K. Creating climates for change and choice: A developmental guidance approach. Unpublished paper, Pennsylvania Department of Education, 1969.

11. Ivey, A. and Morrill, W. Career process: A new concept for vocational behavior. Personnel and Guidance Journal, 1968 40(7), 644-649.

12. Havighurst, R. Human development and education. New York: Longmans, Green and Co., 1953.

13. Ivey, A. and Morrill, W. op. cit.

14. Thoroman, E. The vocational counseling of adults and young adults. Boston: Houghton Mifflin Co., 1968.

With Emphasis on Diagnosis

Robert M. Hontz, Admissions Officer
The Williamsport Area Community College

Of all the frustrations that really "bug" the admissions counselor of today, certainly the most frustrating must be the person who, after stating his desire to acquire post high school education, blithely asks, "What do you have to offer?"

With the advent of the community college which places a college within commuting distance of the majority of high school graduates, more and more students are seeking admission. Many of these students have not responded to the local high school counseling programs and have given little or no thought to a systematic study of occupations. They have failed to answer the questions: "What is there for me to do?"; "What would I like to do?'; "What am I able to do?"; and "Where do I receive the training required?"

A large majority of these students are either not academically qualified or not interested in the college transfer programs, so my remarks today will be concerned with those prospective students who might eventually be enrolled in career or two year terminal programs.

May I suggest, for your consideration a possible solution to this most vexing problem. I would like to discuss the Vocational Diagnostic Program as currently operated at The Williamsport Area Community College.

The program was initiated in 1951 at The Williamsport Technical Institute which became The Community College in 1965. Although the program was specifically designed to serve physically handicapped persons sponsored by public and private rehabilitation agencies, more and more non-disabled persons are now being enrolled. At present approximately two thirds of the enrollees are not classified as physically handicapped or sponsored by a public agency. Referrals come to us from high school counselors, rehabilitation agencies, the college admissions office and from parents who are concerned about their children's vocational future.

The goal of the program is accomplished through testing, individual and group counseling sessions and actual job trials in the various trade and technical shops on campus.

The first week is devoted to orientation, testing, tours of the various instructional areas, and dissemination of occupational information by instructors from the trade and technical areas. Information about educational and training requirements, employment opportunities, physical demands, working conditions, and wage scales are discussed.

The first job trial is selected by the student without benefit of test results. Subsequent trials are based on test results and trial areas are selected after individual counseling and planned with respect to the student's interests, aptitudes and educational background.

A counselor is in daily contact with the student and the instructor during the job trials. The last day and half is spent in separate case conferences in which the student, staff counselor, instructor, and counselor from referring agency meet to explore all factors pertinent to the individual's vocational choice. Recommendations are then made to the student. Some students are accepted by the college, some are referred to other training agencies.

At present, the first three classes for the current year are filled and the class starting in January, 1970 is partially filled. We feel we can adequately accommodate the demand for this program. Since we offer 53 separate career programs, a fairly broad spectrum of general occupational areas is covered. Although no plans have been made as yet to involve business and industry in our job trials, this possibility is being explored.

The administrators at The Williamsport Area Community College feel this program fulfills a particular need in the area of student diagnosis and occupational choice. After three weeks ninety percent of the students make a vocational decision. Certain changes in the program are being planned. Included in the changes are the adding of verbal and non verbal intelligence tests and additional testing in the core areas of English and mathematics.

Since a majority of persons participating in the program can be considered disadvantaged in one respect or another, more emphasis is to be placed on group guidance using group dynamics and peer influences and sensitivities to assist us in accomplishing our aims.

I look forward to the group meetings where we can discuss the program in an informal atmosphere.

The Role of Guidance in Student Diagnosis and Admissions

Robert Gebhardtsbauer, Dean of Student Affairs
Lehigh County Community College

This topic will be approached from the point of view of a person just on the threshold of dealing with Occupational Educations Programs who has sat at the crossroads of academic administrative planning, decision-making and philosophizing in higher education participating therein and observing student needs, desires, frustrations and expectations.

Occupational education is comprehensive not only in terms of fields or areas encompassed but also in terms of an institution's approach to instruction and course content. (I use the latter phrase rather than "rigor" which is so often used here and bandied about by the educational sophisticate implying that only studies at a certain "level" and with a certain type student body possess "rigor".) These curricula in some institutions afford upon completion, immediate entry into a baccalaureate program which is structured (as most are today) on a highly theoretical base and doing so without loss of credit or extending time toward the degree. On the other hand, other institutions - and these predominate - offer curricula which reflect the more immediate needs of business and industry emphasizing rather than theory, skills and practical applications of subject matter to the particular job or professional field for which the student is preparing. To a large degree, institutions tend to be oriented toward one type or the other with only a few somewhere between the extremes.

The community college, philosophically, adds a further dimension. A dimension with which those who study learning, or read the results of studies or have observed and talked with students in the process of learning will agree. That dimension is flexibility! Young people, middle aged and older people individually do not progress in each field at the same pace or have aptitudes and abilities of equal magnitude in all fields. You say this is quite evident - yet education has long made students fit the mold, the curriculum. The community college - unfettered by tradition - has the opportunity to break the bonds. Its orientation suggests that it should, many of the community colleges are, but it remains to be seen whether as a group they will do so or continue to do so.

What does this have to do with the topic? In approaching this subject I must ask to modify the topic to read - The Role of Guidance in Self (rather than "Student") Diagnosis and Curriculum Choice. Don't jump to the conclusion that now I will lapse into the theme of "each has the right to fail" approach. Responsibility is perhaps the greatest catalyst in learning - which (i.e. learning) is really the central theme of our discussion. The community college with its "open door" permits the Admissions Officer, the Counselor, the faculty member, the graduate,

the fellow student to invite a person to continue his education. The comprehensive nature of the institution allows the individual to select from a broad range of educational, vocational and professional fields of opportunity as well as affording the means both to obtain adequate background for entry into these curricula and to have recognized previous experience or training by the awarding of appropriate degree credit.

Appraisal of past achievement, measurements of academic and vocational aptitudes, interests and the like are imperatives. But the greatest need for the person approaching entry to a program is understanding of the nature of the program, its demands, the instructional approach and course content, and the interrelatedness of subject matter and its relevance to his desired ultimate or immediate goal. Furthermore, he needs an appreciation of the options available during and following the completion of the program, and the progress expected by the instructors and college. He also needs an awareness of the opportunities for employment, job satisfaction, the facination of continued learning and discovery which may be present, the income ranges (immediate and long range), growth potential, work demands, frustrations, responsibilities, leadership demands or lack of such, and so forth.

I submit that a discussion of these, and more, with a counselor (augmented by faculty and professionals in the field) constantly picking up the thread of past achievement (or lack of it), measured abilities and/or aptitudes, experiences and interests and weaving these into a prediction of academic success and purposeful and self-satisfying employment, permits the individual to make an enlightened choice superior to that arrived at by selection based on quantified data. Especially do I feel this to be true with the varied student populations represented in the community colleges. The counselor must bring to bear in the discussion(s) the resources at his command: data from placement reports, from occupational outlook publications and from faculty as well as from success factors derived from studies in similar institutions, in the same institution, in the particular curriculum, and in special courses. The counselor's approach must be forthright, factual, immediately involving the student as a participant aware that he is making a vital decision and that he is to do so only after he has weighed carefully the totality of the discussion. Decisions so made will in some instances prove to be unsatisfactory - but the current collegiate attrition rates (academic and otherwise) do not suggest much to credit present methods of selection, where selection is employed. Yes, there will continue to be poor decisions but - hopefully -, caught in time, the person will have a better feeling for advice well given but previously unheeded and - reorienting himself - prove more successful in the new venture probably with more confidence and assurance that this is the right move. Files are replete with the number of students who were earlier channeled or directed into this or that course/curriculum simply because their "scores were too low" or such and such grades were not high enough despite expressed desires and the interests in support thereof which would suggest otherwise. These

same students when given the opportunity and encouragement along with responsibility, displayed better than average success in academic studies and interest in college activities. Was it maturity, was it appreciation, was it latent talent blossoming late but earlier not described by instruments designed to measure such potential? This as well as most facts pertaining to the prediction of success - we need learn more about!

The emphasis in higher education has been too much on education - formal education - rather than learning, be it learning in the abstract or practical and applied. The spokesmen for higher education have talked about producing leaders usually to the exclusion of the important role of those to be led. We need both, we need to encourage both, we must program for both!

The same must be said for the scholarly and the marginal student. This is not an emphasis on mediocrity! It is sound logic to assure each person the opportunity to achieve excellence within his own range of abilities, aptitudes and activities. Is this necessary?

Dr. Edward J. Shoben, Jr., Professor of Higher Education and Director of the Center for Higher Education at the State University of New York, Buffalo has observed that starting in the latter part of the 19th century (The Morrill Act) young people sought to enroll in college not simply to maintain social status but to achieve it or to upgrade themselves occupationally and professionally. After WW II, society encouraged greater numbers of young men and women to attend college. Now, society all but demands that they attend.

The burgeoning enrollment in higher education has occasioned an emphasis on selection not hitherto experienced. With this emphasis -- in colleges which seek to educate the "leaders" -- selection often became (or appeared to become) a matter of prestige rather than fulfillment of a philosophical commitment. It created a rush of comparisons -- based on quantifiable data designed to make an institution look good -- to establish a hierarchy of prestige or excellence (tho' realistically, selection standards moved up and down at will to meet the demands of the budget --, naturally.) The prestige kick created the myth that to learn in the college environs you had to have at least a combined score of ____ on the ____ with the stronger score in the _____ ____!

Speaking to this point, the former librarian at Florida State College, Louis Shure, in an address at Mount Olive College was quoted in AAJC Journal as saying "Those colleges which seek to educate only the top 10% are cowards. Anybody can educate these. The real challenge is to educate the other 90%."

I do not accept his first statement - even resent it -, but I concur with the latter part. Following up on this point and speaking to the logic of its undertaking, Professor Benjamin Bloom of the University of Chicago in a talk to a group of junior college faculty in California

reported on the results of his experimentation in methods of teaching to the effect that "Most students (perhaps over 90%) can master what we have to teach them and it is the task of the instructor to find the means which will enable our students to master the subject under consideration."

Mastery of subject matter is not simply related to the method of presentation but also to its relevance to the student's purpose in undertaking the collegiate program. This is a point on which young adults have become quite vocal. The liberal arts - the vital element in the A.S. degree and of great importance in any baccalaureate - must logically assume a subordinate role in occupational curricula, which are usually designed to prepare persons for immediate effective employment where specialized knowledge, skill and know how which require continual updating and upgrading, are in demand. Understandings gained in the "applied" courses should where the subject matter is appropriate be recognized not only for job advancement or placement but for degree credit. Certainly the technician who has learned well from his technical math course to apply algebra, trig and analytics in the solution of real problems has embraced this subject in a more meaningful and useful way than the person who has completed "X" credits of "pure" math with little appreciation for its application. Learning under the former is "easier" simply because it is relevant, makes sense and is purposeful. Hence the more practically oriented student (and generally the one with lower scores because of this orientation) performs better. Unfortunately, there is reluctance to grant baccalaureate credit for such work even where comparable comprehension is achieved. Where a valid appraisal of achievement is demonstrated, (by exam, verbal exchanges, completion of higher level courses) credit should be extended. Such would go a long way to remove the negative view of career programs.

How do we evaluate the student's opportunity for success? Present literature suggests that new instruments are needed (CEEB-CGP), that there is a scarcity of relevant data, that much more than academic aptitude and achievement, interests, etc., need be evaluated. Speaking of one of the standard instruments for measuring "academic aptitude" (the SAT), Professor Tiedeman of Harvard University, who is chairman of the College Board Committee on Testing, said that -- quoting from the Chronicle of Higher Education Report -- this test measures what a person has learned not what his potential for learning is! (Notwithstanding its name.)

Yet -- for all this-- we find each such instrument and such data valuable. Commenting on testing, Prof. Norman C. Harris, Professor of Technical Education at the University of Michigan (to whom Dean Elison referred earlier) has remarked that "despite the gradual improvement of standardized tests, the best single predictor of college performance is still high school grades. (However,)...high school standing should not be used as a sole criterion. Several measures for prediction are better than one and a philosophy of flexibility should govern the selection process. Standardized tests...are of considerable value when used in

conjunction with other measures." Regarding the use of high school grades as a predictor as suggested by Dr. Harris, difficulty arises immediately with the community college population. A goodly number - more than 50% - have not demonstrated in high school just what is representative of their capability. This may be due to an immature attitude, misdirection resulting from rigid adherence to specific scores on a single test rather than interpretation of several such measurements, personality conflicts, disinterest in the type of subject offered, etc.

In respect to tests, to be at all valid, tests must be studied in relation to achievement of students at the particular institution, in a particular curriculum, at a particular time of curricular development. Since each facet has a dynamic quality, it is difficult to relate the factors and use them in successive years in any way even approaching the absolute. In a new - or relatively new - institution this poses no small problem. One therefore, again, interposes judgment in assessing data.

A study by the American Council on Education designed to study student academic achievement in college (as measured by the G.R.E.) reports that neither the intellectual level of classmates or the level of academic competitiveness or the financial resources of the institution had an influence on achievement (on tests) but rather was dependent upon "abilities" existant prior to entrance to college. Also - no relative difference was noted between the achievement of the bright and the less apt student, as a result of attending the different type of institution.

What does it mean? Students who do well on tests in high school do equally well in tests at the end of college without respect to the type of institution in which enrolled. Similarly, the student not scoring well on tests taken while in high school generally score at the same level at the end of their colleg experience.

We have been discussing prediction of college achievement. Can we then use college achievement in turn to predict future success? Those in the research division at ACT who reviewed 46 studies on the relationship between college grades and adult achievement concluded that"... present evidence strongly suggests that college grades bear little or no relationship to any measures of adult accomplishment." Does this mean that the student should not strive in college for understanding? Of course not!

How does the community college philosophy make more difficult the analysis of data in regard to projecting success?

We are committed to a philosophy which would have us aid an individual reach a goal reasonably well selected by affording developmental work, extending continuing aid in the classroom, permitting reduced course

loads, curriculum or schedule modification, all to enhance the person's opportunity to succeed - even when success would mean entering the employment field to perform well a job somewhat less demanding than that for which the basic intent of the collegiate program was meant to prepare the graduate. Conversely, we would aid the more academically apt or skilled student to extend his program by taking additional subjects, granting credit for experience, enroll in independent investigation courses and the like. All this would be done with the view of offering him the opportunity to make the most of his talents and enabling him to assume a more responsible or sophisticated job, or to select the option of continuing immediately the pursuit of a higher degree.

I have, for some years, mulled over a statement by Winslow Hatch in one of the early series of Dimensions in Higher Education. He states in this article referring to standards of excellence in collegiate programs "the less selective institution can be as effective as the selective one if it will stop 'telling' its students and improve its 'teaching' and the student's learning. Actually, the less selective the college is, the more the institution needs to do this."

The inference I draw from the conclusion he reached in respect to student learning, I employ in counseling young people on curriculum selection. Who should decide on curriculum selection? Reserving in unusual cases veto rights where the possibility of doom is too great - or extenuating circumstances where institutional staff and facilities do not afford unrestricted enrollment, my vote - with the understanding that a real effort is made to appraise well student attributes, curricular expectations and employment demands and opportunities - will be the student - assuming as I do that he will make an enlightened decision based on self-interest!

Introduction: "Organizational Patterns Most Conducive for the Development and Conduct of Occupational Programs"

Harold E. Farneth, Academic Dean
South Campus, Community College of Allegheny County

We have enjoyed two days of intellectual exchange of information and points-of-view relative to our common concern - how to better provide for occupational education within our respective institutions.

On Monday a comprehensive view was presented. Yesterday we narrowed upon the strategies for resolving selected student-related problems. Today we shall concentrate on strategies for resolving the problems of faculty - staff relationships and problems as they pertain to the promotion, development, and administration of occupational programs.

Some of the major problems in this area are to be found in the following topics: What organizational patterns are most conducive to successful occupational programs? How responsive should a new institution be to the existing educational establishment within a community? Do occupational programs differ so markedly from academic programs that they must be entirely separate from one another? If not entirely separate, how can they be coordinated? What priority should be assigned to occupational programs within a community college or university campus? What budgeting problems develop? Can institutional budget formulas apply equally across the various programs of the college? How do we justify the varying costs? How can we minimize the tendency to relegate programs to differing levels of prestige and importance?

I am especially pleased to present to you a panel of speakers who are eminently capable of discussing all of these issues. Dr. Kenneth E. Carl, our first speaker, in my opinion is the most occupationally-oriented Community College President within the State of Pennsylvania. He has succeeded in building the community college concept around what had previously been one of the foremost secondary vocational schools in the State. As President of the Williamsport Area Community College, he can demonstrate the compatability of occupational and academic programs under one administrative head. He firmly believes in coordination of existing educational institutions with the newly established programs of the community college. His planning at Williamsport represents a most pragmatic solution to the problem.

Dr. William A. Koehnline, Dean of Instruction, Harrisburg Area Community College, had a somewhat different situation facing him. He was to organize a new institution, with rapid growth potential within our capital city, placed within 50 miles of at least 25 other institutions of higher learning. Realizing the need for comprehensive

programming almost overnight, he and his colleagues set out to develop an integrated pattern of organization that refused to accept major differences among programs as to their mode of operation or leadership. Separateness was to be avoided. He will emphasize within his talk just how this unity of organization supports occupational education within the community college.

Mr. Leroy W. deMarrais, President of South Campus, Community College of Allegheny County, is confronted with an even different sutuation. Leading the third college to be developed in a County System of Community Colleges, he must find ways to develop programs, compete for budgets not only with the State and other educational institutions, but also with sister campuses within the system. What precedents should be followed, which abandoned? What programs should be offered across all three campuses, or restricted to one? What programs can realistically be offered in interim facilities?

An Administrative Unit Combining the AVTS and the Community College

Kenneth E. Carl, President
The Williamsport Area Community College

First, let me say that I am quite confident that all of the panelists participating in this discussion will agree--if not now, at the end of this panel session--that there is no one organizational patterns that will be considered most conducive for the development and conduct of Occupational Programs in all community colleges.

Which pattern you may consider preferable is conditioned by how you feel it works or might work in the area for the population served by your respective college. It is certainly possible that if you or I were located in an area with other conditions our choice would be different. Williamsport is in a unique section and we have innovated the idea of combining the area vocational-technical school with the community college under the same administration. This combination is provided for in our Community College Law.

The Community College Law in Pennsylvania states under Section 2. Definitions. - (4) "Community College" shall mean a public college or technical institute which is established and operated in accordance with the provisions of this act by a local sponsor which provides a two-year, post-secondary, college-parallel, terminal-general, terminal-technical, out-of-school youth or adult education program or any combination of these. The Community college may also provide area vocational technical education services to secondary senior high school students." (The underlining has been made by the writer.)

Further, under Section 6. Powers and Duties of Board of Trustees - (7) "To enter into contracts for services to high schools of member districts to provide area vocational-technical education services."

It is believed that Pennsylvania was the first State in the nation to adopt this permissive legislation permitting the community colleges to offer AVTS services to secondary students of sponsor districts.

We understand that a few other States have, since 1963, included this provision within their community college law; however we do not have any evidence to substantiate this statement.

We believe that this legistlation is or can be helpful in some areas. It allows an area vocational-technical school that is having problems supporting the programs it offers to consolidate with a community college or add a community college program to what is offered, thus becoming a more efficient and economical operation. We would suggest that in many areas of the State that have not as yet provided for a public community college, or even an AVTS school, that consideration might be given to combining these two schools (to provide the

enrollment and programs necessary) to operate such a school. As you may recall the State Board of Education has determined that there should be as many as 28 public community colleges in the Commonwealth--presently we have only 12. A few of the 16 yet to be organized may well be structured from off-campus centers operated presently by various universities that are not quite meeting the needs of the area in which they are located. By combining such schools, the remaining number might be started rather quickly with certain going programs already established. In some areas the community college and the AVTS might be located on the same campus under separate administrations and in other cases perhaps the best answer is to have both under the same administration.

It is our belief that where the AVTS and the community college can function under the same administration that a considerable economic advantage can be obtained with higher efficiency of operation.

The following are some of the obvious advantages of such a single administrative unit:

1. The administration is responsible for both programs (the AVTS and the community college) to the sponsor. Budgeting then is on an equal basis. If operated as separate schools the budgets are likely to be skewed towards one program or the other depending on the general attitude, momentarily, of the respective boards. Thus, budgetwise, it is felt that a better use of the available monies can be made in such a combined school.

2. We have the problem of articulation of students in the AVTS who wish to go on to further occupational education in the community college from the AVTS. Certainly with both programs being operated by the same administration there should be the closest kind of articulation between the high school program under the AVTS and the post-high school program in the community college. Under any other separate type of operation it would be expected that articulation could well be problematical at times.

3. By proper scheduling both the AVTS and the community college can cooperatively use many of the common facilities and laboratories, thus reducing the capital costs to the sponsors and securing much more efficient operation of these facilities. As an example, we have at Williamsport a machine shop with $400,000 worth of equipment, not counting the building in which it is housed, that is being used by both the AVTS and the community college students. It would seem very asinine in our case to build another machine shop across the street for only the AVTS students. We believe in this one case alone we are saving the taxpayers of our area at least $500,000 in capital costs by not duplicating such shops and labs for two separate schools.

4. It is up to the administration to play for both programs, the AVTS as well as the community college. Thus, the responsibility if fixed at all times and equal emphasis is placed on providing the equipment and space needed for both programs with the same school. Planning must be done to take care of these needs.

Other administrative plans such as two separate schools on the same campus with each school sharing some of its facilities with the other school on a part-time basis will not work as well in the long run. Remember that each administrator is planning for only his own institution and when his facility is operating at capacity for his own students he has no room for the students from the other school, nor can he properly provide the necessary equipment as his concern is for his own students. Thus, when the AVTS machine shop becomes full of high school students the community college students are denied use of this shop and when the community college chemistry lab is scheduled to capacity with community college students, the AVTS students are likewise denied use of the chemistry lab. Admittedly, such a cooperative use of facilities will work for awhile, but do expect problems in this area if you operate under this plan.

5. Another related problem is that of changes in demands for particular programs within the school. With the one administrative unit concept it is much easier to adjust, or expand, as the case may be in one or the other programs. If the enrollment in the AVTS in graphic arts falls off to the point where it is necessary to close the department many more options for use of this facility are available when it is operated as a part of one administration.

6. Under the one administrative unit concept the faculty for both the AVTS and the community college are hired by the college and thus both enjoy exactly the same fringe benefits, pay scales, professorial rank and rating system. Admittedly there is the problem of certification for those staff members teaching in the AVTS program, but otherwise all staff are assigned where they are most interested insofar as possible and can do the best job. The opportunity is there for all staff members to transfer from one program to the other when an opening exists providing they qualify for the position, and when adjustments are necessary in staff assignments due to changing, the staff can be reassigned accordingly.

In my opinion there is no reason why we cannot have cooperation between the AVTS schools and the community colleges even when they are operated under separate administrations. Some of you are cooperating and successfully providing occupational education by using each other's facilities and staff on a part-time basis. All it takes is a willingness to sit down and discuss the program and mutually decide who will do what. Further, I can see that the sponsorship of the program in question might change many times in the future, depending upon who can receive the most reimbursement for the program. As the reimbursement changes in favor of one or the other, the administration of the program might also change accordingly.

An Integrated Administration Pattern

William A. Koehnline, Dean of Instruction
Harrisburg Area Community College

The organization of the college I represent, and the pattern I wish to advocate this morning, are based upon a philosophy of integration.

Before naming any functionaries, we have chosen to begin with a schematic depiction of the functions that are to be performed, as shown in Chart 1. We begin with somebody having to exercise legal control. This function is supported by a twofold horizontal flow of advice, from outside the body and from within the body exercising legal control.

Legal control is exercised from outside the institution. Administration takes place within. Supporting general administration is again a twofold horizontal flow of advice. In addition, general administrative functions are supported by a flow of information, professionally collected and interpreted for the benefit of the total program of the institution.

The third line in Chart 1 show that service functions are performed within three branches from the stem of general administration. These services are, respectively, those that are directly instructional; those that are related to student personnel, other than direct instruction; and administrative services, which are generally supportive of the program of the entire institution, rather than directly instructional or student oriented. The service functions, like the legal control and general administrative functions, require advice. The advice-giving and advice-taking functions are of major importance to smooth operation.

Let us next turn to the Administrative Organization, as shown in Chart 2. The form of the second chart is more conventional than that of the first. Our blocks are no longer anonymous. At the top, in place of "legal control," we have the Board of Trustees, supplemented by the Solicitor. The functions of this body are spelled out in the law. They are common to all Pennsylvania Community Colleges.

Advisement flows in from the community advisory committee, which has subcommittees on curriculum, cultural programs, foundation support, public information, and scholarships; and from the committees of the Board itself, which are concerned with finance, personnel, and physical plant, as well as with program.

The office of the president is shown at line 3. He is assisted by two administrative functionaries within his office--namely, the administrative assistant who serves to support the work of the president by making arrangements for meetings, releasing information to the public, assisting with publications, academic ceremonies, etc., and the director of research and community resources, who collects and generates the data needed by the president and others as a basis for decisions. Finally, the branches of service are represented by the offices of three deans, with their assistants or associates.

Currently we have six divisions. They are named Business and Management Services; Communication and the Arts; Life Sciences, Health Services, and Physical Education; Mathematics, Physical Sciences, and Engineering (MAPSE); Police and Public Administration; and Social Sciences. In theory each division should include service courses, career programs, and transfer programs. In practice the divisions are variously proportioned

Five of the six divisions currently have responsibility for one or more career programs. The Business and Management Services Division offers seven career or occupational programs, in Accounting, Business Management, Data Processing, Hospitality-Food Service Management, Office Studies, Retailing, and Secretarial Science. This is the largest number of career programs offered by any one division. The runner-up is Mathematics, Physical Science, and Engineering, with five technology programs: Civil Engineering Technology, Computer Engineering Technology, Electronic Engineering Technology, Electronic Service and Merchandising, and Drafting Technology, with options in Architectural Drafting and Civil Engineering Drafting.

Third in number of career programs is our Division of Police and Public Administration, with three programs. These are in Correctional Rehabilitation, Police Management, and Public Service. Two divisions have one career program each. The Life Sciences Division has an associate degree program in nursing, and the Social Sciences Division has a program for training Mental Health Aides.

The sixth and last division, Communication and the Arts, although it does not have now a career program, has the potential for developing several programs in broadcasting, journalism, applied writing, and related areas.

In contrast to the 17 existing career programs for which individual divisions have primary responsibility, there are only four transfer programs which are assigned to divisions. These are Business Administration, Education, Education, Engineering, and Police Science and Administration.

As you can imagine from the way the divisions are organized, (see Chart 3) we do not make a separation between occupational and transfer programs. We do have two deans in one office, but the sharing of duties

is on a basis quite different from the terminal-versus-transfer distinction.

The Dean of Instruction has responsibility for all curriculum development, for working with advisory committees, division personnel, the Curriculum and Instruction Committee of Faculty Council, the Council itself, and the Administrative Committee, which includes the President and the deans. He is responsible for development of instructional activities, including course proposals, analyses, outlines, syllabi, and for appropriate and effective methods of instruction. Finally, he has primary responsibility for two major college publications, the Catalog and the Faculty Handbook. The two deans of instruction share budgetary responsibilities and duties associated with professional development of faculty and staff--conferences, visits to other institutions, continuing graduate study, etc.

The Division Chairmen have three responsibilities, namely scheduling, curriculum planning, and staffing. The one responsibility on which I will concentrate here is that of curriculum planning. In the category of programs and courses, the chairman supervises the design of new curricular offerings, and the maintenance, review, and improvement of existing offerings in the area of his division's interest.

Let's take some examples. In engineering technologies we have established two-year associate degree programs in Civil Engineering Technology, Electronic Engineering Technology, and Electronic Service and Merchandising. The first two programs fall entirely within the province of the MAPSE division. The third is a shared responsibility between MAPSE and Business. The chairman of the MAPSE division took the initiative to stimulate the faculty members who teach in these programs to develop one-year certificate programs in each of the three technologies. These proposals were presented to the Curriculum and Instruction Committee of the Faculty Council. After review by Faculty Council and the administrative committee (president and four deans) the certificate programs will be included in the offerings of the college for 1970-71, and will be a continuing responsibility of the MAPSE division.

A second current example of curriculum building within an integrated pattern of organization is the creation of a Library Aide program by the Office of Instructional Resources. Four years ago the college created an advisory committee to develop a two-year curriculum for the preparation of supporting personnel for school and public libraries. At that time there was not sufficient evidence of readiness on the part of the library associations and of the practitioners in the service area of the college to warrant the establishment of a program. In 1968, the climate had changed. Therefore, we have employed an assistant librarian whose primary duty will be to conduct the special courses required for the education of library aides. Under the supervision of the coordinator of instructional resources, she researched and prepared a curriculum.

Together, the coordinator and the faculty member presented the proposal to the faculty committee. From that point on, the sequence is identical to that for engineering technologies, as already described.

In both of these examples, you may imagine, the Dean of Instruction hovering near the scene of action, ready to encourage, support, consult, or run interference, if need be, but serving neither as advocate nor judge of the new programs, which have to be salable on their own merits, if they are to be implemented.

My colleagues on the panel may feel that an integrated pattern does not meet the special demands of an occupational program. They may raise questions of costs, funding, special promotional needs, liaison with industry, etc. Let me anticipate those objections and give a preliminary response to them.

First, there is the matter of budget. How does an integrated pattern of organization permit an institution to cover the high costs of many occupational programs? By integrating technologies, which require more money per capita than most other programs, with mathematics, which requires very little beyond salary and general overhead expense, we permit a single division to be self-supporting, rather than having one division produce the revenue which supports another. Of course, the system doesn't work perfectly. There are advantages, however, to having business administration support secretarial science. As we all know, it's less expensive to educate executives than to stenographers. In our system, the education of the one very nearly finances the additional costs in the education of the other.

Generally speaking, then, and frankly a little more in theory than in practice, each division in an integrated pattern of organization generates the funds that support its segment of the curriculum. There are not apparent surpluses in one division and apparent deficits in another. The service courses in any division help to defray the costs of the special courses offered by that division for the benefit of its special clients, the students enrolled in the programs that it sponsors.

Related to costs is the question of special funding for occupational programs. Does an integrated pattern of organization tend to miss out on vocational education funds?

My answer is in the negative. One reason for success in obtaining funding is the close cooperation between the college business office and the instructional office. Any lead has been followed up by the officer best equipped to do so, but no official has assumed that somebody else, such as a special vocational dean, was handling funding. It is a primary responsibility of every administrator.

Another reason for success is to be found in good lines of communication with and through the Bureau of Community Colleges. Although the Bureau if organized with separate persons taking responsibility for transfer and occupational programs, my office has maintained equally close relations with both, and has benefited from information pertaining to one type of program or the other, as well as from information that pertains equally well to both types.

Occupational programs undoubtedly do require more promotional activity and expense than do transfer programs. Students need to be recruited, sometimes with and sometimes without the support of parents and high school counselors. How does an integrated pattern of organization facilitate such activity?

The answer will be fairly obvious by this time. Each division, needing brochures, dinner meetings, an advisory committee, an open house, or a newspaper story, should budget for this activity and carry it out, relying upon the three central offices for support as needed.

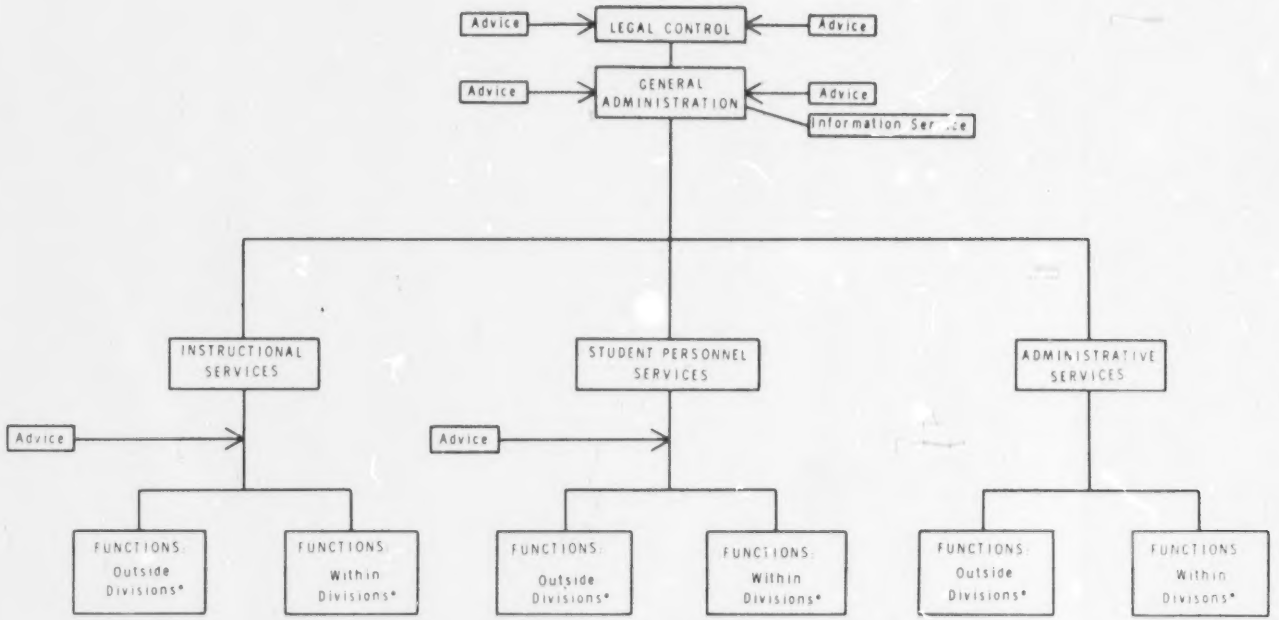
Finally, there is the question of adequate contact with industry, government, and other potential employers. Does the integrated pattern of organization allow the institution to maintain all of the appropriate off-campus contacts that are necessary to support placement and follow-up activities? Again our reply would be affirmative. With government and with large and diversified companies we have found that it is necessary to maintain several parallel connections between the college and the employer.

The college has no single central officer concerned exclusively with student placement. If an employer is interested both in office staff and in technically trained production staff, we maintain two lines of communication with him. Although he may have one man or one office concerned with all hiring, no employer has yet objected to having more than one college person working with him. We are in constant communication among ourselves. As a result, we think we have more and better contact with employers and prospective employers than we would have with a less tightly integrated pattern of organization.

Negatively, one might say that the pattern I advocate results in having no administrator, and very few faculty members, especially or primarily concerned with the occupational programs of the college. Positively, the integrated pattern demands that every key administrator, and practically every faculty member every day, be concerned with the occupational program. If there are incidental apparent inefficiencies and slight redundancies, we who have had up to five years working within an integrated organization believe that all of them are a small price to pay for what we gain.

Chart #1

FUNCTIONAL CHART OF ADMINISTRATION 1969-70



*For Purposes Of This Chart,
The Term "Divisions"
Refers Only To The Six
Academic Divisions. See Chart #3

ADMINISTRATIVE ORGANIZATION

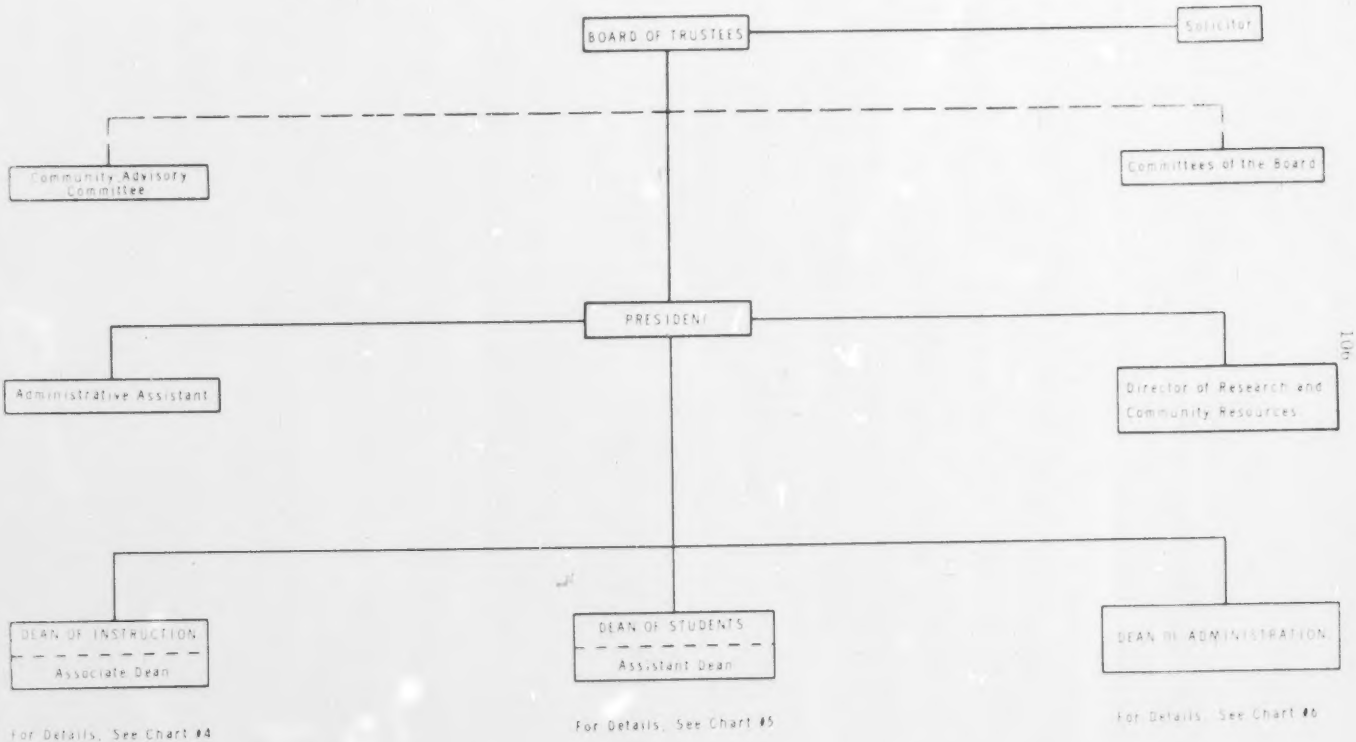
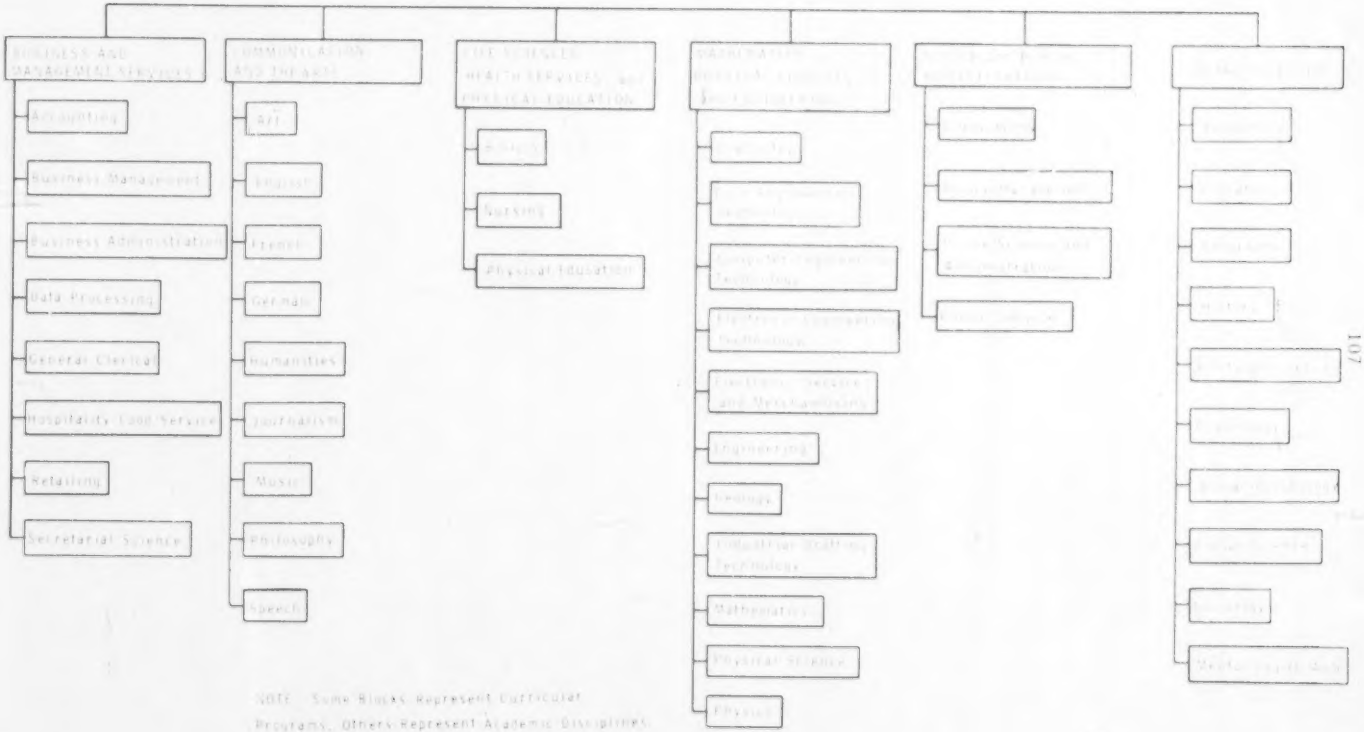


Chart #1

IDENTIFICATION OF DIVISIONS



NOTE - Some Blocks Represent Curricular Programs, Others Represent Academic Disciplines

Politics, Institutional Priorities, Fiscal Support, and Instructional Problems Relating to Post-secondary Vocational Education

L. W. deMarrais, President
South Campus, Community College of Allegheny County

Up until this point, I have always felt that the last part of the program was the best position to be in. Now I can see all I do is control the time when we break and take coffee.

I happen to agree almost completely with what I have heard from my fellow panelists respecting the organization of the technical curriculum will be, is a matter related to time and space.

Obviously the Harrisburg Area Community College is well organized after five years. A brand new college, however, has quite different organizational problems which are really political problems and rightly so, because political means belief as to how best to organize society, if you will, how to produce workers on the one hand and citizens on the other. It becomes strictly a political matter at the outset as to how you are going to organize the college and the vocational curriculum.

A college in an urban setting with countless small, private, and perhaps thriving technical schools is going to be a very different college as to curriculum than the college organized in a rural setting where there is no competition, where all students transfer.

A new college in a county that has had no tradition of public higher education, which has a very-well developed system of private education--particularly private technical schools--becomes a threat to the private technical schools if it were to announce too publicly its long-term curriculum goals.

The third college in a system of colleges is going to have to consider different problems than the organizers of the first two colleges of the system. The third college, which is my circumstance, is in a particular bind as to its vocational and technical curriculums because the first two colleges have not yet succeeded in filling student quotas in their vocational curriculums. At the same time, commercially or industrially oriented community leaders demand that it produce a vocational curriculum.

No matter how you look at it, what the curriculum will be then is a political matter! On the one hand it is what you can get away with, on the other what you can hold back or what you can ignore.

I might give you a very specific example. South Campus of the Community College of Allegheny County is located within a mile of the County Airport, a very modern airport with large fleets of executive

aircraft. Within sight of my office is perhaps one of the most prominent aircraft technical schools in the country. I am pressed continuously to respond to the needs of the aircraft industry. I am personally motivated to do so because I am a commercial pilot but I doubt very much that we can support long enough to survive the aircraft technologies that some would like to see established. I must find technologies which threaten no one for the time, which cost relatively little money, and which do indeed perform a service that is needed in the area.

Or consider the case of a college in a marginal town which is economically threatened, whose average age is well beyond the average for all citizens, a town which is now a retirement town such as Youngstown, Ohio, or McKeesport, Pennsylvania. No matter what the college does it is a threat. If it were supported primarily by the local tax base, the chances are that it would not grow because the source of income is the retired worker. The situation suggests that the organization of the college in such an area is appropriately a county or other large political unit and not the city however large its population.

I think this is what Dr. Carl had in mind. The organization of any college is going to be appropriate to the particular area and cannot be generalized across the board.

At the beginning of the third year I think we are where we should be, in our setting, but only in our setting. We are not terribly vocational because the other two campuses have covered us well. Students in a three-college system have the choice of going to the college which offers the curriculum they choose. This is the way we politically had to solve our problem.

I have had a good deal of trouble in my life with vocational educators and I happen to have been a student of Norman Harris. I happen to have spent most of my life in business yet I find it very difficult to verbalize support for the vocational technical program without stressing the importance, and perhaps the primary importance, of the basic courses, the core courses, and of even the liberal arts courses as the economic base of the technical curriculum. This is quite clearly the case in Harrisburg and it probably points the way to the integrated curriculum. Without such support, the technical curriculum cannot survive.

The technical curriculum, which is expensive to establish, becomes an albatross about the organizers' necks if it had sold to the board and then fails for lack of student support.

I want to take a couple of minutes to get to a point that Dr. Farneth has raised. It is one that never ceases to bug organizers of vocational curriculums, that of the status of the various curriculums. Harrisburg obviously has tried to minimize the difference between the status of the curriculums. I frankly don't think this is going to work in the long run. The status of curriculums actually is a status which the work carries. The doctor has a higher status in our society than

the carpenter, and I don't think we can do too much about it.

Our problem is how to get students with various potentials into appropriate-level courses. I have lost faith that they can be induced by massive orientation or counseling. I have a feeling that the skillful faculty recruiter is still the best of all recruiters. I have no faith whatsoever that we can arbitrarily rearrange the status of curriculums. Our problem is still how to get students into the curriculum irrespective of the status of the work.

We must act as if all curriculums had equal status, as if it is really idiosyncratic as to which curriculum the student takes or the instructor teaches. It is the position of the occupational-technical people in the last fifteen years which has made the difference seem to be so great--whether a man chooses to teach carpentry or electronic technology will from his point of view depend upon perhaps his luck--where he started and where he now is. But in the end he does what is satisfactory to him. To claim unrealistic status is to emphasize status differences which only compound the problem of recruitment.

Introduction: The Establishment and Utilization of Advisory Committees

Donald L. Hagen, Dean of Technologies and Development
Northhampton County Area Community College

It is with a great deal of pleasure that I introduce our panel on advisory committees. These men will address themselves to a topic that makes the community college and branch campus truly community oriented. Such institutions are sensitive to and concerned about the manpower needs of the community they serve.

The members of this panel represent three distinct groups which, directly or indirectly, are involved in the functioning of an advisory committee. A college president will approach the topic from the point of view of an administrator; a college faculty member, from the faculty point of view; and a lay advisory committee member, from his respective point of view.

Dr. James Lawson will present the administrative view. He serves as President of Butler County Community College. Dr. Lawson holds a Bachelor's degree from California State Teachers College and his Masters and Doctorate from the University of Pittsburgh. He has been associated with the profession for the past thirty-two (32) years, with the exception of the World War II period. His experience in education ranges from the elementary to the university level. He has written extensively for professional publications and has been a lecturer and consultant.

Mr. Paul Maleskey will present the faculty view. He is currently Professor of Chemistry and Chairman of Technology at Lehigh County Community College. Mr. Maleskey holds his Bachelor's degree from Kutztown State College and his Master's degree from Pennsylvania State University. He has been in the profession for the past twenty (20) years teaching at the preparatory school, high school and community college levels. He has also published, lectured, and served as a consultant.

Dr. Herman Beam will present the lay advisory committee member view. He is currently a practicing dentist in Easton, Pennsylvania and a member of the Dental Hygiene Advisory Committee at Northampton County Area Community College. Dr. Beam holds a Bachelor's degree from Lafayette College and his Doctorate of Dental Medicine from the University of Pennsylvania. He has practiced his field for the past thirty-one (31) years and was instrumental in securing a community floridation program in the City of Easton. He is past president of both the Easton Dental Society and the Lehigh Valley Dental Society.

A President's View of the Establishment and Utilization of Curriculum Advisory Committees

James D. Lawson, President
Butler County Community College

The term community college not only implies the complete concern for community interests and needs but specifically indicates the involvement of community representation in program development or revision. This would also be true for any other educational institution which is designed to give direct attention to localized need. The use of advisory committees for non-localized need and for participation in recommendations beyond program development or revision is equially significant and viable.

Post-secondary occupational education as a facet of commonwealth service whether in community colleges, commonwealth centers or in private colleges or institutions can benefit greatly from advisory committee participation. Changing technological requirements, changing labor market demands, and shifting populations, all are factors strongly setting the need for continuous use of advisory committees. General and special advisory committees are both required. James W. Thornton in his book, The Community Junior College, indicates that the general advisory committee can serve the following functions:

1. To assist the college administration in interpreting developments in the economy and the consequent educational needs of the community.

2. To develop community support and understanding of the educational program of the college.

3. To advise the college board and administration, in the annual meeting and individually thereafter, on problems of college policy submitted to them.

4. To help in interpreting the junior college to the many groups from which the general advisory committee's membership is drawn (1:165).

Special advisory committees having limited function may be formed to give advice in a single or closely related group of courses or to establish a conference or seminar. This is particularly meaningful in the technologies where less than a total program leading to a degree or certificate may be desired.

Advisory committees, whether general or special, should involve personnel from the lay community, the professional staff, and student body.

In the development of committees the following guidelines are important:

1. They serve as public relations avenues from the college to the community.

2. They provide knowledge and experience not accessible to the college from other sources.

3. They stimulate community, state, and national support for the educational policies of the college.

4. They provide an opportunity for members of the community to be heard before policies or programs are implemented by the college.

5. They tend to reflect and protect the public interests.

6. They provide advisement for placement of graduates (2:191).

Specific responsibilities of advisory committees in technical education include:

1. Standards for the selection of students
2. Recommendations regarding the content of courses
3. Placement of graduates
4. Recommendations for physical facilities and equipment necessary for the program.
5. Aiding the college in obtaining competent instructors
6. Development of informational programs about the curricula
7. Securing of more effective cooperation with management and labor in the industry
8. Trends in educational requirements and employment opportunities in the industry (3:192).

Technical educational advisory committees are formed on an ad hoc or continuing basis for most technologies whether electronics, cosmotology, nursing, park management, accounting, merchandising or for a specific course on small engine repair. Occasionally, more sophisticated programs or courses in the forefront of a new technological breakthrough may find difficulty in securing localized committee participation.

Potential problems exist in advisory committee use, particularly if established on a continuing basis. These may include, for example:

1. Assumption of policy making or administrative functions

2. Infringement on professional faculty members determination of course content or program implementation

3. Promotion of limited outlook based on discreet needs of their own experience either as employers or based on their own professional preparation

or

other potential problems could exist due to:

1. Lack of breadth of knowledge to see the relationship between the specific course or program to the total programming of the college

2. Limited knowledge of what the immediate future will require over and beyond their present level of operating experience.

It is important in the technologies that an advisory committee of specialized expertise when assembled does not override the generalist approach of the educational professionals and create either a partial approach to the field of study or establish nonattainable criteria for the level of instruction.

Advisory personnel, either on an ad hoc or continuing basis, whether appointed or convened, should have the opportunity to be recognized by the institution, by the community, and provided with opportunity to see the program to which they have contributed at the operational level. In some instances, such advisory personnel may further participate with the institution in a type of professionally related professional chapters with the students who are enrolled in the program.

A limited policy statement initially used by Butler County Community College is quoted as follows:

"Advisory Committees to Butler County Community College are ad hoc in nature, consisting of specifically invited, knowledgeable individuals of recognized leadership capacity, who meet with College personnel in analyzing proposed programs and/or courses of study.

The Ad Hoc Committees meet on invitation of the President of the College, work directly with the Dean of Faculty and selected Faculty members. They culminate their finding in three to five meetings, through specific suggestions for Community College consideration. On occasion Advisory Committees may also assist in informing the recruiting selected prospective students and in effecting relationships between the Community College and other organizations to contribute to the effective work-study aspect of the program.

The Chairman of the respective Ad Hoc Advisory Committee will become a representative to the Central Advisory Committee which will meet directly with the President and Board of Trustees at stated periods during the year."

The role of the president in this particular relationship can well be that of the professional-arranger, who looks upon his faculty and administrative personnel as the prime movers for program introduction, program revision, or program interrelationship with total college effort.

References:

1. Thornton, James W., The Community Junior College, New York: John Wiley and Sons, Inc. 1960

2. Blocker, Plummer, Richardson, The Two-Year College: A Social Synthesis, New York: Prentice-Hall, Inc. 1965

3. Ibid.

Utilization of Advisory Committees by the Faculty

Paul Maleskey
Professor of Chemistry and Chairman of Technology
Lehigh County Community College

An advisory committee, by definition, is a group of persons selected from the community with the main purpose of advising the teachers and administrators regarding some or all phases of occupational educational programs.

There are three main categories of advisory committees (1:26):

1. General advisory committee - deals with the entire school program.

2. Occupational advisory committees - those that work in specific areas.

3. Joint apprenticeship committees determine apprenticeship standards, measurements of competency and on the job work experience.

Generally the teacher will be working directly with the occupational advisory committee, and when appropriate, with the joint apprenticeship committee.

The selection of the members of the occupational advisory committee lies in the hands of the college president, the dean or an appointed administrator or teacher. The following criteria should be used in determining qualifications for membership:

1. Have shown competence in their field over a period of several years.

2. Have made contributions in their field and be readily accepted as an authority by their fellow workers.

3. Have an interest in the education and welfare of our youth.

4. Have available time and a willingness to help the program success.

5. These groups exist for the purpose of advising the teachers and administrators concerning the entire educational program including equipment, laboratory layout, etc. It is important that they be engaged on the firing line of their occupation where they come into daily contact with the changes and problems of their job. There is often a tendency to appoint personnel directors or high level executives

to these committees. This may be a mistake; it is necessary to have people who are employed in situations similar to the type of job that your graduate will be seeking.

A prospective member should be briefed on his duties and area of responsibilities. With the member's acceptance, his name is submitted to the college Board of Trustees. Upon its approval, the member is notified by letter of his appointment to the advisory committee. It is to be noted that the appointment by the Board of Trustees carries with it a certain amount of prestige, indicating to the new member that the Board is desirous of his help and knowledge. The success of the committee is dependent upon these men.

New career programs in college are begun by showing community need in a specialized area. This may be done by a survey of industry, hospitals, etc. or can be more direct by the community leaders regenerating specific programs in the college. Formation of an advisory committee at this point can be extremely beneficial in enlisting support for the program from a group of people who, in turn, can be public relation personnel to the rest of the community. Public acceptance of these programs is paramount. The advisory committee members in their duties of making recommendations and suggestions for the curriculum, laboratory or shop layout, testing qualification for the teachers, and aiding in the recruitment of students sell themselves on the usefulness of the program.

Selection of the chairman is as important or even more so than the selection of the individual members. This may be a representative of the college or one of the layman from the committee. Care must be exercised that he is neither too aggressive nor too timid. He should be a person who is tactful, personable, amiable, one capable of getting the group to work harmoniously. His main duty is to preside at all of the committee's meetings and take an active role in the preparation of the agenda (1:26). He should assume leadership for only a portion of the meeting, drawing in as many of the members as is possible with discussion and leadership roles.

The chairman should be open to all suggestions for agenda for meetings, but should be discreet in the selection of the material to be discussed. It is his duty to inform the secretary of the committee of the dates and the agenda of the meeting and to be sure that committee members receive this material at least two to three weeks prior to the meeting. If something urgent comes up, he can solicit opinions from the members by phone or call an emergency meeting.

The meetings should be rather informally handled, not adhering strictly to Roberts Rules of Order, which many times seems to stifle opinions of members. The discussion should flow smoothly and efficiently under the guidance of the chairman.

The term of membership should be from one to three years with staggered replacement. A member may be reappointed by request of the dean of the career program along with the approval of the members.

The size of the committee should be restricted so that it is mobile and flexible, but large enough so that subcommittees can be formed. Seven to nine active members usually do well.

The college will be represented by the appropriate dean or division chairman and members of the faculty directly involved in the program. A college representative may serve as chairman, secretary, or consultant. Because the college representative is seeking advice, he should not have a vote in the proceedings.

The college representative, in agreement with the chairman, will arrange meetings, prepare the agenda, keep minutes of the meetings, and provide clerical assistance as required by the committee.

The principles of operation for these committees is much the same as those found in any successful organization. The first rule to observe is that of meeting only when you have a reason to meet. This means that not all committees will meet on the same schedule as some other occupational groups; some are more dynamic than others and require more frequent changes in the programs.

The second rule is to plan the meeting. This means notifying the members in advance of the meeting, and making adequate preparations for them. In this respect, whenever a group is called together an agenda should be developed and at least the major items for discussion should be sent to the members in advance. Unless this is done, the members will be illprepared to assist in solving the problems. The development of the agenda insures that you are prepared to meet the group in a worthwhile meeting instead of just a gab session. Nothing will discourage the committee as much as a meeting which is not structured.

In preparing for the agenda, care should be given to select items pertinent to the work of the committee. We often hear that advisory committees attempt to take over the function of the administration. This happens only when those who are structuring the meeting schedule discussion on matters that pertain to administration. Should the group get into matters that are administrative in nature, the trend can be stopped if the chairman or college representative makes a move to stop it before too much ground is covered.

The conduct of the meeting should be handled as expeditiously as possible. Establish a set time for adjournment and adhere to this. Members who want to stay beyond this time to discuss other matters will do so, but those who have other commitments will leave with the feeling that something worthwhile has been accomplished.

Last, but not least, in the conduct of the meting is the preparation of the minutes. Any meeting worth holding is worth a brief but complete description of the topics discussed, the suggestions, assignments for further study, and such other matters which have a bearing in the program. These minutes, mailed to the members, help to provide continuity to the proceedings. They also permit the chairman or college representative to structure each future meeting upon the results of the last meeting. This is an important factor in maintaining interest.

The value of an advisory committee lies in the use that is made of its inherent talents. The men selected thrive on leadership and responsibilities, present them with problems you want solved, not with the answers. Give them a free rein, encouragement and stand aside to reap the harvests of their efforts.

Our technological advances have made some jobs obsolete and created scores of others as replacements. A teacher working in an area of occupational education must be kept aware of these changes so that he can educate in the light of present vocational needs. There is no better way of updating yourself and your program than making use of your advisory committee. These men will work diligently with the college representatives in providing changes to the curriculums to overcome the obsolescence that seems to be built in programs. They will point out the things that are necessary in a specialty and those on which little emphasis must be placed. The teacher will be getting information directly from men immersed in the occupation as a vocation. Call upon the advisory committee; have them aid you in curriculum building.

As a teacher of chemical technology, I have found the advisory committee to be extremely helpful to me in two ways:

1. Selection of sophisticated equipment for the laboratory (infrared spectrophotometer, nuclear magnetic resonance, gas chromatograph.)

2. Support in convincing the college administrators that the above equipment is necessary for our program.

Referring to item one above, there are men on our committee who have spent the last five to six years working only in the area of infrared spectrophotometry. These men are the specialists that can aid a teacher in the selection of an infrared and its accessories. Their advice will be good because they are acquainted with the educational program, having worked on curriculum, the physical facilities, the calibre of the students and the teacher. Many times these men enjoy helping the teacher set up the type of job within the vocation which he feels that the student can best handle. Have your advisors set up interviews in their companies, and if possible, have them a part of the

interview group. You will find that the advisory committee will come up with many jobs for the graduate.

Teachers, call upon your advisory committee members to speak to your classes in specialized areas. An annual affair in our college is having a petroleum chemist lecture on gasoline, oils, and automobiles. Another gentlemen who is a biochemist, lectured on the pill. A spectroscopist from an electronic laboratory spoke about emission spectroscopy. The topics which they may discuss are generally not covered in a textbook, but are interesting, useful, often contemporary in nature, and can serve to fire the students with an enthusiasm for chemistry.

In conclusion, speaking as a teacher who has worked many years with advisory committees, they are indispensable.

References:

1. Riendeau, Albert J. The Role of the Advisory Committee in Occupational Education in the Junior College. Washington: The American Association of Junior Colleges, 1967.

2. Elison, George W. "Functions of Advisory Committees". Lecture, Scranton, Pennsylvania, 1964.

The Advisory Committee as Viewed by a Lay Member

Herman Beam, D.D.S.

My part in the program is to discuss certain pertinent points which arise when advisory committees are formed to aid in the development of career programs.

Assisting in the development of career programs can give rise, either directly or indirectly, to selfish motives on the part of advisory committee members. These are most often concealed by the excellent results which occur thru the energetic work of the committee. These same hidden motives provide the stimulus which activates the committee members who may benefit in the final results. Of course, what helps them, also helps the college and the students involved.

The needs of the community determine what occupational opportunities should be provided. The greater the number of career programs required, the greater the need for advisory committees. This suggests the involvement of increased numbers of community business, industrial and professional leaders.

Being asked to serve on a career advisory committee is actually receiving a compliment. It is a new and exciting way to assist the youth of our community. Acceptance means realization that a challenge exists, that responsibility will be assumed, and that the individual will do his best to serve the special needs of his locality.

Having accepted the invitation to serve, the advisory committee member contributes in the following ways.

1. Offering professional competance - possibly by providing guest lecturers; thereby widening the base of knowledge.

2. Assisting in setting up the curriculum and reviewing it periodically, with emphasis on subject matter as well as special attention to practical matters.

3. Meaningful assistance to students: field trips to points of interest, to industrial operations, to places of possible future employment to enable the student to observe and ask questions pertaining to the subject being studied are concrete examples of such assistance.

4. Recruiting of interested students.

5. Aiding in the placement of graduates and follow-up to determine how well they actually perform on the job.

The following will serve to illustrate what an advisory committee can and should provide:

Northampton County Area Community College opened its door to students in October 1967. In November 1967, the college in cooperation with the Lehigh Valley Dental Society, conducted a survey of area dental offices to determine if there was a need for a program to prepare dental hygienists. The survey showed an immediate and continuing long range need for trained hygienists.

In December 1967, an advisory committee was formed, consisting of twelve (12) dentists and four (4) dental hygienists.

This committees' goal was to assist in the establishment of the fourth dental hygiene school in the State of Pennsylvania. This was to be accomplished with the knowledge that, first; three existing dental hygiene schools were operating in the Commonwealth in conjunction with long established dental schools. Secondly; no physical plant existed to house the srecial requirements of such a program. Thirdly; there was no state approval, director, faculty, curriculum or students, and fourthly; the probable date of the first class entering was 1971, which incidentally; made the advisory committee extremely unhappy.

At its first meeting, the committee elected its offices and formed sub-committees. These sub-committees were charged with specific tasks which were subsequently carried out as follows:

1. Recommendations concerning equipment needs - Trips were made to Temple University, University of Pennsylvania and the State Dental Meeting in Philadelphia to view equipment installations and exhibits.

2. An Instructional Resources study - Here the sub-committee visited three dental hygiene schools including Broom Technical Community College of Binghamton, New York, where an existing mode of operation was observed.

3. The Curriculum Sub-committee in an attempt to consider all possible alternatives utilized the services of several consultants - Dr. R. L. Matkin, Assistant Secretary of the Council of Education of the American Dental Association was one of them. His assistance provided the framework for the committee's instructional recommendation. A proposed curriculum was drawn up, presented to the sub-committee, revised, then presented to the full committee and approved.

4. The Faculty and Staff committee evaluated the colleges needs and recommended that two types of positions be created. It also assisted in determining the job descriptions for these

positions and helped to interview qualified candidates. The recommended positions and their respective qualifications were: (a) Chairman of the Dental Hygiene Department - a hygienist with a M.S. degree, (b) Executive Director - a dentist working part-time who acts as consultant to the Chairman of the Dental Hygiene Department and assists in classroom teaching and clinic supervision.

By January 1969, the advisory committee decided that it did not want to lose its momentum by waiting until 1971. (The date when the initial dental hygiene class would have had permanent housing for its required clinics and classrooms.)

A sub-committee for fund raising was created and during the ensuing campaign, local dentists pledged $27,500.00. This money enabled the college to provide temporary housing for the dental clinic in a mobile home. The date of the first class of dental hygiene students was thereby advanced two years to September 1969, and classes are now in session.

Thus, this advisory committee demonstrated its value by providing:

1. Leadership along with a willingness to give unlimited amounts of time in visiting other institutions and in reviewing curriculums.

2. Expertise and outside consultants services.

3. Assistance in the recruiting of faculty.

4. Leadership in an intra-professional fund-raising drive.

This relationship I have described between the advisory committee and the college, as viewed by an advisory committee member, is a unique one.

The relationship must be a continuing one, as change occurs constantly. To ignore these ties is to fall behind in the knowledge of changing goals, interests and industrial and professional trends.

It is recommended that the following suggestions be carried out to maintain a healthy rapport between the committee members and the college:

1. Faculty members should look toward committee members for information on current training requirements.

2. Faculty members should alert the committee to problems they encounter and ask for assistance in the solution of such problems.

3. The advisory committee should be involved in the selection of faculty with primary teaching assignments in the program that it advises.

4. The advisory committee should assist teachers in obtaining first hand experiences through arranging visitations to their offices or clinics and in securing summer work for students.

I thank you for the opportunity of presenting this success story to each of you.

Evaluation and Conclusions

Angelo C. Gillie

All too often the evaluation of conferences such as this one is comprised of the opinions of the individuals who organized the event. In order to have some measure of the effect the three-day conference had on the participants, pre-conference and a post-conference questionnaires were designed. A total of 49 participants filled out either or both instruments. Specifically, there were 43 completed pre-conference questionnaires, 42 completed post-conference questionnaires, and there were 42 individuals who filled out both instruments.

The overall evaluation scheme was:

1. To identify changes in the attitudes of the participants on ten topics related to post-secondary occupational education that were to be touched upon in the conference. These are the first ten items that appear on both the pre-conference and post-conference instruments.

2. To identify changes in degree of knowledgeability of the participants on twelve topics which were directly related to the main presentations and panel topics.

3. To determine the value placed by the participants on each of the papers presented in the conference.

4. To determine the participants' impressions of the overall conference.

5. To determine the value of the discussion sessions.

The evaluation of these five aspects of the conference are reported in the following paragraphs.

1. Attitudinal changes on ten selected topics

Attitudes toward ten topics, rated in the form of Strongly Agree (4), Agree (3), Disagree (2), and Strongly Disagree (1) were obtained in both the pre-conference and post-conference questionnaires. See the Appendix for the questionnaires. The participants, as a group, did not strongly agree with any of these statements, but did agree with three of them both before and after the conference. These were:

3. The comprehensive community college can provide the best setting for the conduct of occupational programs.

5. Pennsylvania should have more community colleges in order to provide occupational programs on a more wide-spread basis.

10. A graduate program for the development of faculty and leaders of post-secondary occupational education should be inaugurated at The Pennsylvania State University.

It should be pointed out that the extent of agreement was about the same after the conference as it was before it began. Refer to Table 1 in the Appendix for the actual means. This would indicate some persistence in the agreement of the group with the topics above. There was mild agreement with the following statement:

6. The commonwealth campuses of The Pennsylvania State University and the community colleges are competing for the same kind of students in occupational programs.

This revelation points out the tension that exists in some quarters between the community colleges and the commonwealth campuses of the university.

The participants disagreed with the other six statements found on the first page of the questionnaires. This can be interpreted in the following manner:

a. The participants do not feel that the community colleges should earmark a predetermined percentage of student enrollment for occupational programs.

b. The participants are against the idea of having special purpose institutions for occupational education.

c. The participants do not feel that the Pennsylvania community colleges are allocating an adequate portion of their resources to the conduct of occupational programs.

d. The participants feel that the Center for the Study of Higher Education at The Pennsylvania State University should include the study of post-secondary occupational education in its efforts.

e. The participants feel that the commonwealth campuses of the Pennsylvania State University should not expand their offerings in occupational education.

f. The participants believe that community college legislation in Pennsylvania is not too prescriptive.

It is interesting to note that the points of disagreement are as revealing as are those topics with which they agreed.

2. Knowledgeability changes of the participants for twelve topics

The degree of knowledgeability for the twelve topics covered in the main presentations and the four panels was examined in items 11 through 22 of both questionnaires. The respondents were asked to rate their knowledgeability on a seven-point differential scale, with seven being the most knowledgeable and one being the least (i.e. not-knowledgeable). As with the preceding ten topics, means were computed for both the pre-conference and post-conference results.

The pre-conference questionnaire indicated that the participants felt themselves most knowledgeable in the following:

a. The utilization of lay members an advisory committees (Means = 5.2).

b. The role of guidance in the preparation of students having a wide range of competencies (Mean = 5.1).

c. Development of constructive relationships between advisory committees and the college administration (Mean = 5.0).

d. The role of the counselor for occupational program students (Mean = 5.0).

e. Approaches to student recruitment (Mean = 4.9).

f. Constructive relationships between the advisory committee and occupational program faculty (Mean = 4.8).

Looking at the other end of the knowledgeability spectrum, the two topics rated lowest by the respondents (Mean = 3.8) were:

a. Ideas on the specialized school within the college as a mechanism for the support of occupational education

b. The united concept as a mechanism for the support of occupational education

The change in knowledgeability, as indicated by the differences between the pre-conference and post-conference means, was not very great for the majority of the twelve items. This finding comes as no great surprise, since each of the items was the theme of only one presentation.

The two topics in which the participants felt they had acquired the greatest increase in knowledgeability were:

15. The united college concept as a mechanism for the support of occupational education (Post-Conference Mean - Pre-Conference Means = +1.5)

12. Relationships between admissions and guidance (Post-Conference Mean - Pre-Conference Mean = +1.0).

These were followed by four items, each with a difference in means of +0.8:

11. Approaches to student recruitment

13. Ideas on the specialized school within the college as a mechanism for the support of occupational education.

16. The role of the counselor for occupational program students.

19. Approaches to meeting fiscal and instructional problems relating to occupational education.

The smallest change in knowledgeability, indicated by a change in the mean of only 0.3, occurred with the following two topics:

18. The role of guidance in the preparation of students having a wide range of competencies.

21. Constructive relationships between the advisory committee and occupational program faculty.

Rating of the Presentations and Panel Topics

The participants were asked to rate each main presentation and panel topic in terms of its value to them. This was a part of the post conference questionnaire (See Appendix). The rating scale was: much value, some value, little value, no value. These were assigned numerical values and the arithmetic means were computed. Using the means as a criterion, the four topics considered most valuable were:

27. Post-secondary Occupational Education and the Pennsylvania Master Plan for Higher Education.

28. Successful Strategies for Student Recruitment, Planning, and Cooperative Work Experiences.

24. Post-Secondary Occupational Education in Pennsylvania and Implications for the Future.

23. Post-Secondary Occupational Education in the United States and Implications for the Future.

The value assigned to each of the topics is found in Table 2 (see the Appendix).

Participants' overall impressions of the Conference:

Included on the last page of the post-conference questionnaire were sixteen statements. The participants were asked to indicate their impression of the entire Conference by checking those statements that apply. Sixty-nine percent of the respondents indicated that they thought the conference had served its purpose. The impression "I hope that it can be an annual event" was checked by 62 percent. Sixty per cent felt that it helped them personally and fifty percent indicated that it provided them with the kinds of information they can apply to their own situation. It would appear, based on these results, that the majority of the participants had a favorable impression of the three day event. See Table 3 in the Appendix for a complete listing of the impressions.

Evaluation of the Discussion Sessions:

The final item on the post-conference questionnaire was a request to the respondent to indicate his overall impression of the discussion sessions in terms of their value to him. The rating scale was the same one used to rate the main presentations and panel topics. Numerical values were assigned (much value = 4 down to no value = 1). The mean for the group turned out to be 2.8. Based on this result, it appears that the participants considered the discussion sessions valuable to them.

Conclusions:

The three day event appeared to be a success in a number of ways. First, it served to bring together a number of people from various academic communities who shared a common concern for post-secondary occupational education. Prior to the Conference, many of these persons had not communicated with each other to the extent that they were able to share ideas and viewpoints. The discussion sessions, luncheons, and informal social gatherings served to stimulate such a dialogue. Secondly, although the evaluation instrument was not able to detect significant changes in attitude toward certain topics, other changes were discernable. As indicated in an earlier paragraph, the degree of knowledgeability the participants felt they possessed did increase between the time they filled out the pre-conference and post-conference questionnaires. Thirdly, the impressions indicated by the participants of the entire conference are encouraging. A fourth point of success is that the discussion sessions did serve a valuable purpose, as shown by the high value assigned to them.

The conference was successful in other important ways too. As far as is known to this writer, the event has been the first state-wide conference on post-secondary occupational education in the United States. Furthermore, the consortium which supported the three day affair was somewhat unique in itself. This consortium consisted of The Bureau of

Community Colleges of Pennsylvania, along with The Center for the Study of Higher Education and The Department of Vocational Education, both of The Pennsylvania State University. There are indications that "The Pennsylvania Conference on Post-Secondary Occupational Education" will become an annual event, primarily because of the fine results obtained from this first attempt.

Appendices

A. Pre-Conference Cover Letter and Questionnaire

B. Post-Conference Cover Letter and Questionnaire

C. Table 1: Pre-Conference and Post-Conference Means: Items 1-22.

D. Table 2: Rating of the Presentations and Panel Topics

E. Table 3: Impressions of the Conference

F. Conference Program

G. Registered Participants

A. Pre-Conference Cover Letter and Questionnaire

Dear Conference Participant:

The Conference you are about to attend is intended to have some influence on your feelings about, and knowledge of, certain topics that relate to post-secondary occupational education. One measure of effectiveness of the Conference will be the degree to which the above was accomplished. In order to determine the extent to which you might have been influenced by the Conference activities, you are asked to complete the attached pre-Conference questionnaire.

Since it is a pre-Conference questionnaire, it is important that it be completed before you attend any of the sessions. Estimated completion time is 10 minutes or less. Please return the completed questionnaire to the registration desk prior to entering the first event of the Conference.

Thank you for your assistance.

The Conference Planning Committee

NOTE: BE SURE TO PRINT YOUR NAME ON PAGE ONE OF THE QUESTIONNAIRE.

Name _____
Last First

Listed below are several statements. To what degree would you agree with each of them? Circle the term that agrees with your best judgment. An example of how you might rate a statement is given below:

STRONGLY AGREE AGREE (DISAGREE) STRONGLY DISAGREE

1. The community colleges could better emphasize occupational education by reserving a predetermined percentage of student enrollment for occupational programs.
   STRONGLY AGREE AGREE DISAGREE STRONGLY DISAGREE

2. Post-secondary occupational education would benefit most if it were provided in special institutions designed for that primary purpose.
   STRONGLY AGREE AGREE DISAGREE STRONGLY DISAGREE

3. The comprehensive community college can provide the best setting for the conduct of occupational programs.
   STRONGLY AGREE AGREE DISAGREE STRONGLY DISAGREE

4. The majority of the Pennsylvania community colleges presently are allocating an adequate portion of their resources to the conduct of occupational programs.
   STRONGLY AGREE AGREE DISAGREE STRONGLY DISAGREE

5. Pennsylvania should have more community colleges in order to provide occupational programs on a more wide-spread basis.
   STRONGLY AGREE AGREE DISAGREE STRONGLY DISAGREE

6. The commonwealth campuses of the Pennsylvania State University and the community colleges are competing for the same kind of students for occupational programs.
   STRONGLY AGREE AGREE DISAGREE STRONGLY DISAGREE

7. The new center for the study of higher education at the Pennsylvania State University should not include the study of post-secondary occupational education in its efforts.
   STRONGLY AGREE AGREE DISAGREE STRONGLY DISAGREE

8. The commonwealth campuses of the Pennsylvania State University should continue to expand their offerings in occupational programs.
   STRONGLY AGREE AGREE DISAGREE STRONGLY DISAGREE

9. Community college legislation in Pennsylvania tends to be too prescriptive as to types of programs the community college should offer.
   STRONGLY AGREE AGREE DISAGREE STRONGLY DISAGREE

10. A graduate program for the development of faculty and leaders of post-secondary occupational education should be inaugurated at the Pennsylvania State University.
    STRONGLY AGREE AGREE DISAGREE STRONGLY DISAGREE

Listed below are several statements. They relate to several types of information considered relevant to post-secondary occupational education. To what degree would you say that you are knowledgeable on each of these topics? Place an X at that point on each scale that agrees with your best judgment. An example of how you might mark a scale is given below.

KNOWLEDGEABLE__x__:_____:_____:_____:_____:_____:NOT-KNOWLEDGEABLE

11. Approaches to student recruitment
KNOWLEDGEABLE_____:_____:_____:_____:_____:_____:NOT-KNOWLEDGEABLE

12. Relationships between admissions and guidance
NOT-KNOWLEDGEABLE_____:_____:_____:_____:_____:_____: KNOWLEDGEABLE

13. Ideas on the specialized school within the college as a mechanism for the support of occupational education
KNOWLEDGEABLE_____:_____:_____:_____:_____:_____:NOT-KNOWLEDGEABLE

14. Development of constructive relationships between advisory committees and the college administration
KNOWLEDGEABLE_____:_____:_____:_____:_____:_____:NOT-KNOWLEDGEABLE

15. The unified college concept as a mechanism for the support of occupational education
NOT-KNOWLEDGEABLE_____:_____:_____:_____:_____:_____: KNOWLEDGEABLE

16. The role of the counselor for occupational program students
NOT-KNOWLEDGEABLE_____:_____:_____:_____:_____:_____: KNOWLEDGEABLE

17. The utilization of lay members on advisory committees
KNOWLEDGEABLE_____:_____:_____:_____:_____:_____:NOT-KNOWLEDGEABLE

18. The role of guidance in the preparation of students having a wide range of competencies
KNOWLEDGEABLE_____:_____:_____:_____:_____:_____:NOT-KNOWLEDGEABLE

19. Approaches to meeting fiscal and instructional problems relating to occupational education
NOT-KNOWLEDGEABLE_____:_____:_____:_____:_____:_____: KNOWLEDGEABLE

20. Planning and conducting successful cooperative work experience programs
NOT-KNOWLEDGEABLE_____:_____:_____:_____:_____:_____: KNOWLEDGEABLE

21. Constructive relationships between the advisory committee and occupational program faculty
KNOWLEDGEABLE_____:_____:_____:_____:_____:_____:NOT-KNOWLEDGEABLE

22. Successful strategies in career planning for occupational program students
NOT-KNOWLEDGEABLE_____:_____:_____:_____:_____:_____: KNOWLEDGEABLE

B. Post-Conference Cover Letter and Questionnaire

Dear Conference Participant:

The Conference you have just attended was intended to have some influence on your feelings about, and knowledge of, certain topics that relate to post-secondary occupational education. One measure of the effectiveness of the Conference is the degree to which the above was accomplished. In order to determine the extent to which you might have been influenced by the Conference activities, you are asked to complete the attached post-Conference questionnaire.

Your response to the questionnaire will be used in the evaluation of the Conference. The final report of this Conference will include an evaluation chapter and will be available within the next few months. As a participant of the event, you will be sent a copy of the final report when it is published.

A pre-addressed envelope is provided for your convenience. Upon completion of the questionnaire, would you enclose it in this envelope and mail it back to us? Thank you for your participation and for your assistance in the evaluation of the Conference.

The Conference Planning Committee

NOTE: BE SURE TO PRINT YOUR NAME ON PAGE ONE OF THE QUESTIONNAIRE.

Name_____
Last First

Listed below are several statements. To what degree would you agree with each of them? Circle the term that agrees with your best judgment. An example of how you might rate a statement is given below:

STRONGLY AGREE AGREE (DISAGREE) STRONGLY DISAGREE

1. The community colleges could better emphasize occupational education by reserving a predetermined percentage of student enrollment for occupational programs.
STRONGLY AGREE AGREE DISAGREE STRONGLY DISAGREE

2. Post-secondary occupational education would benefit most if it were provided in special institutions designed for that primary purpose.
STRONGLY AGREE AGREE DISAGREE STRONGLY DISAGREE

3. The comprehensive community college can provide the best setting for the conduct of occupational programs.
STRONGLY AGREE AGREE DISAGREE STRONGLY DISAGREE

4. The majority of the Pennsylvania community colleges presently are allocating an adequate portion of their resources to the conduct of occupational programs.
STRONGLY AGREE AGREE DISAGREE STRONGLY DISAGREE

5. Pennsylvania should have more community colleges in order to provide occupational programs on a more wide-spread basis.
STRONGLY AGREE AGREE DISAGREE STRONGLY DISAGREE

6. The commonwealth campuses of the Pennsylvania State University and the community colleges are competing for the same kind of students for occupational programs.
STRONGLY AGREE AGREE DISAGREE STRONGLY DISAGREE

7. The new center for the study of higher education at the Pennsylvania State University should not include the study of post-secondary occupational education in its efforts.
STRONGLY AGREE AGREE DISAGREE STRONGLY DISAGREE

8. The commonwealth campuses of the Pennsylvania State University should continue to expand their offerings in occupational programs.
STRONGLY AGREE AGREE DISAGREE STRONGLY DISAGREE

9. Community college legislation in Pennsylvania tends to be too prescriptive as to types of programs the community college should offer.
STRONGLY AGREE AGREE DISAGREE STRONGLY DISAGREE

10. A graduate program for the development of faculty and leaders of post-secondary occupational education should be inaugurated at the Pennsylvania State University.
STRONGLY AGREE AGREE DISAGREE STRONGLY DISAGREE

Listed below are several statements. They relate to several types of information considered relevant to post-secondary occupational education. To what degree would you say that you are knowledgeable on each of these topics? Place an x at that point on each scale that agrees with your best judgment. An example of how you might mark a scale is given below.

KNOWLEDGEABLE__X__:_____:_____:_____:_____:_____:NOT-KNOWLEDGEABLE

11. Approaches to student recruitment
KNOWLEDGEABLE____:_____:_____:_____:_____:_____:NOT-KNOWLEDGEABLE

12. Relationships between admissions and guidance
NOT-KNOWLEDGEABLE_____:_____:_____:_____:_____:_____: KNOWLEDGEABLE

13. Ideas on the specialized school within the college as a mechanism for the support of occupational education
KNOWLEDGEABLE_____:_____:_____:_____:_____:_____:NOT-KNOWLEDGEABLE

14. Development of constructive relationships between advisory committees and the college administration
KNOWLEDGEABLE_____:_____:_____:_____:_____:_____:NOT-KNOWLEDGEABLE

15. The unified college concept as a mechanism for the support of occupational education
NOT-KNOWLEDGEABLE_____:_____:_____:_____:_____:_____: KNOWLEDGEABLE

16. The role of the counselor for occupational program students
NOT-KNOWLEDGEABLE_____:_____:_____:_____:_____:_____: KNOWLEDGEABLE

17. The utilization of lay members on advisory committees
KNOWLEDGEABLE_____:_____:_____:_____:_____:_____:NOT-KNOWLEDGEABLE

18. The role of guidance in the preparation of students having a wide range of competencies
KNOWLEDGEABLE_____:_____:_____:_____:_____:_____:NOT-KNOWLEDGEABLE

19. Approaches to meeting fiscal and instructional problems relating to occupational education
NOT-KNOWLEDGEABLE_____:_____:_____:_____:_____:_____: KNOWLEDGEABLE

20. Planning and conducting successful cooperative work experience programs
NOT-KNOWLEDGEABLE_____:_____:_____:_____:_____:_____: KNOWLEDGEABLE

21. Constructive relationships between the advisory committee and occupational program faculty
KNOWLEDGEABLE_____:_____:_____:_____:_____:_____:NOT-KNOWLEDGEABLE

22. Successful strategies in career planning for occupational program students
NOT-KNOWLEDGEABLE_____:_____:_____:_____:_____:_____: KNOWLEDGEABLE

Name_____
Last First

The Main Presentations and Panel Topics are listed below. Rate each in terms of its value to you. MV = much value; SV = some value; LV = little value; NV = no value; DNA = did not attend. Circle the appropriate response.

23	MV	SV	LV	NV	DNA	Post-Secondary Occupational Education in the United States and Implications for the Future
24	MV	SV	LV	NV	DNA	Post-Secondary Occupational Education in Pennsylvania and Implications for the Future
25	MV	SV	LV	NV	DNA	Post-Secondary Occupational Education in Commonwealth Campuses and Future Implications
26	MV	SV	LV	NV	DNA	Center for the Study of Higher Education and Implications for Occupational Education
27	MV	SV	LV	NV	DNA	Post-Secondary Occupational Education and the Pennsylvania Master Plan for Higher Education
28	MV	SV	LV	NV	DNA	Successful Strategies for Student Recruitment, Planning, and Cooperative Work Experience
29	MV	SV	LV	NV	DNA	Community College Legislation and Implications for Post-Secondary Occupational Education
30	MV	SV	LV	NV	DNA	The Role of Guidance in Student Diagnosis and Curriculum Choice
31	MV	SV	LV	NV	DNA	Original Patterns Conducive to Development and Conduct of Occupational Programs
32	MV	SV	LV	NV	DNA	The Land-Grant Concepts and Engineering Technician Education
33	MV	SV	LV	NV	DNA	The Establishment and Utilization of Curriculum Advisory Committees

142 A

Indicate your impression of the entire Conference by checking the statements that apply.

____a. It was one of the best Conferences I have ever attended.

____b. It was exactly what I wanted.

____c. I hope it can be an annual event.

____d. It provided the kinds of information that I can apply to my own situation.

____e. It helped me personally.

____f. I think it served its purpose.

____g. It had some merits.

____h. It was neither very good or very bad.

____i. It was typical of many Conferences I have attended.

____j. I was mildly disappointed.

____k. It was not exactly what I wanted.

____l. It was too general in nature.

____m. I did not take away any new ideas.

____n. It didn't hold my interest.

____o. I was dissatisfied.

____p. It was a complete waste of time.

34 MV SV LV NV DNA Indicate your overall impression of the discussion sessions in terms of their value to you.

C. Table 1. Pre-Conference and Post-Conference Means: Items 1-22.

Items 1 - 10:

Item	Pre-Conference Means	Post-Conference Means	Difference between Means
1	2.3	2.3	0
2	2.0	1.8	-0.2
3	3.2	3.2	0
4	2.3	2.1	-0.2
5	2.9	3.2	+0.3
6	2.7	2.7	0
7	1.9	1.6	-0.3
8	2.3	2.1	-0.2
9	2.1	2.1	0
10	3.1	3.2	+0.1

Note: For the above items: Strongly Agree = 4; Agree = 3; Disagree = 2; Strongly Disagree = 1.

Item	Pre-Conference Means	Post-Conference Means	Difference between Means
11	4.9	5.7	+0.8
12	4.4	5.4	+1.0
13	3.8	4.6	+0.8
14	5.0	5.6	+0.6
15	3.8	5.3	+1.5
16	5.0	5.8	+0.8
17	5.2	5.7	+0.5
18	5.1	5.4	+0.3
19	4.0	4.8	+0.8
20	4.1	4.6	+0.5
21	4.8	5.1	+0.3
22	4.4	5.0	+0.6

Note: For items 11 through 22: A seven point differential scale was employed with most knowledgeable = 7 and most not knowledgeable = 1.

D. Table 2. RATING of the Presentations and Panel Topics (Listed in Descending order)

Topic No.	Topic Title	Topic Mean
27	Post-secondary Occupational Education and the Pennsylvania Master Plan for Higher Education	2.6
28	Successful Strategies for Student Recruitment, Planning, and Cooperative Work Experiences	2.6
24	Post-Secondary Occupational Education in Pennsylvania and Implications for the Future	2.5
23.	Post-Secondary Occupational Education in the United States and Implications for the Future	2.4
29	Community College Legislation and Implications for Post-Secondary Occupational Education	2.3
26	Center for the Study of Higher Education and Implications for Occupational Education	2.2
25	Post-Secondary Occupational Education in Commonwealth Campuses and Future Implications	2.0
30	The Role of Guidance in Student Diagnosis and Curriculum Choice	1.9
33	The Establishment and Utilization of Curriculum Advisory Committees	1.9
31	Original Patterns Conducive to Development and Conduct of Occupational Programs	1.8
32	The Land-Grant Concepts and Engineering Technician Education	1.2

Note: The respondents rated each topic in the following manner: Much value = 4; Some value = 3; Little value = 2; No value = 1; Did not attend = 0.

E. Table 3. Overall Impressions of the Conference

Impression	Number of Responses	Percentage of Responses
I think it served its purpose	29	69%
I hope that it can be an annual event	26	62
It helped me personally	25	60
It provided the kinds of information that I can apply to my own situation	21	50
It had some merits	16	38
It was neither very good or very bad	7	17
It was one of the best conferences I have ever attended	6	14
It was exactly what I wanted	4	9
It was typical of many conferences I have attended	3	7
I was midly disappointed	3	7
It was not exactly what I wanted	2	5
It was too general in nature	2	5
I was dissatisfied	1	2
It was a complete waste of time	1	2
I did not take away any new ideas	0	0
It didn't hold my interest	0	0

Monday, October 6 — A COMPREHENSIVE LOOK AT POST-SECONDARY OCCUPATIONAL EDUCATION

8:00 - 9:00 a.m. — Registration - J. Orvis Keller Building

9:00 - 9:30 — Introduction, et. al. - Room 312

A. Convening of the Conference

Dr. A. C. Gillie, Associate Professor

B. Welcome

Dr. VanderMeer, Dean of the College of Education, The Pennsylvania State University

C. Introduction of Guests

D. Orientation of the Conference

Mr. Robert L. Sheppard, Chief
Occupational Education Division
Bureau of Community Colleges

9:30 - 10:30 — "An Examination and Analysis of the Role of Post-Secondary Occupational Education in the United States and Implications for the Future."

Dr. Lewis R. Fibel, Executive Director
Maryland State Board of Community Colleges

10:30 - 11:00 — Coffee Intermission - Multipurpose Room

11:00 - 12:00 — "An Examination and Analysis of the Role of Post-Secondary Occupational Education in the Pennsylvania Community Colleges and Implications for the Future."

Dr. Allen T. Bonnell, President
Community College of Philadelphia

12:00 - 1:30 p.m. — Luncheon - Nittany Lion Inn

Mr. Robert Sheppard presiding

"The Center for the Study of Higher Education and Implications for Post-Secondary Occupational Education."

Dr. G. Lester Anderson, Director
Center for the Study of Higher Education
The Pennsylvania State University

1:30 - 2:30 p.m.	"An Examination and Analysis of the Role of Post-Secondary Occupational Education in the Commonwealth Campuses of The Pennsylvania State University and Implications for the Future." Mr. Gerald Russell, Assistant to the Provost The Pennsylvania State University
2:30 - 3:00	Coffee Intermission - Multipurpose Room
3:00 - 4:00	"Post-Secondary Occupational Education and The Pennsylvania Master Plan for Higher Education." Dr. Louis Bender Assistant Commissioner of Higher Education Commonwealth of Pennsylvania
4:00 - 7:00	Dinner
7:00 - 7:30	Orientation of Participants to Group Discussions
7:30 - 9:00	Small Group Discussions
	Group A: Critique of Fibel Paper - Room 312 Leader - Mr. James P. Bressler Recorder - Mr. William Homisak
	Group B: Critique of Bonnell Paper - Room 306 Leader - Dr. Robert Foster Recorder - Mr. George McCutcheon
	Group C: Critique of Anderson Presentation - Room 311 Leader - Richard J. Popp Recorder - William A. Piccoli
	Group D: Critique of Russell Paper - Room 209 Leader - Charles A. Gilmore Recorder - Edward Anderson
	Group E: Critique of Bender Paper - Room 204 Leader - Richard Skinner Recorder - James A. Keyzer
9:00	Adjourn

Tuesday, October 7 — STRATEGIES FOR RESOLVING SELECTED STUDENT RELATED PROBLEMS

9:00 - 10:00 a.m. — Panel: Successful Strategies for Student Recruitment, Planning, and Cooperative Work Experiences.

Chairman: Dr. Wilmot Oliver
Dean of Instruction
Community College of Delaware Co.

Panelists: Dr. S. Hartley Johnston
Community College of Beaver Co.

"Student Recruitment"

Mr. Eugene Ventura
Community College of Allegheny County - South Campus

"Successful Strategies for Career Planning"

Mr. William Ferencz
Harrisburg Area Community College

"Successful Strategies for Developing Cooperative Work Experience Programs"

10:00 - 10:30 — Coffee Intermission

10:30 - 12:00 — Discussion Groups (Critique of Preceding Panel)

12:00 - 1:30 p.m. — Luncheon - Nittany Lion Inn

Mr. Robert Sheppard presiding

"Community College Legislation in Pennsylvania Its Implications for Post-Secondary Occupational Education."

Mr. Robert Knoebel, Director of the Bureau of Community Colleges, Department of Education, Commonwealth of Pennsylvania

1:30 - 2:30 p.m. Panel: The Role of Guidance in Student Diagnosis and Curriculum Choice

Chairman: Mr. George Elison,
Dean of Technology
Lehigh County Community College

Panelists: Mr. John A. Rebert
Department of Education

"The Role of Guidance for People With A Wide Range of Competencies"

Mr. Robert M. Hontz
Williamsport Area Community College

"The Role of Guidance As Seen By A Counselor"

Mr. Robert Gebhardtsbauer
Lehigh County Community College

"The Relationship of Guidance to Admissions"

2:30 - 3:00 Coffee Intermission - Multipurpose Room

3:00 - 4:30 Discussion Groups (Critique of Preceding Panel)

4:30 - 7:30 Dinner

7:30 - 9:00 Informal Discussions and Conversations With Conference Observers

Fireside Room, Nittany Lion Inn

Wednesday, October 8 — STRATEGIES FOR RESOLVING SELECTED FACULTY - Administrative Problems

9:00 - 10:00 a.m. — Panel: Organizational Patterns Most Conducive for the Development and Conduct of Occupational Programs

Chairman: Dr. Harold Farneth, Academic Dean
Community College of Allegheny County - South Campus

Panelists: Dr. Kenneth Carl, President
Williamsport Area Community College

"The Specialized School Within The College As A Concept of Organization and Support of Occupational Programs"

Dr. William A. Koehnline
Harrisburg Area Community College

"The One College Concept of Organization in Support of Occupational Programs"

Mr. LeRoy W. deMarrais, President
Community College of Allegheny County - South Campus

"Institutional Priorities, Fiscal Support, and Instructional Problems Relating to Post-Secondary Vocational Education"

10:00 - 10:30 — Coffee Intermission - Multipurpose Room

10:30 - 12:00 — Discussion Groups (Critique of Preceding Panel)

12:00 - 1:00 p.m. — Luncheon - Nittany Lion Inn

Presiding:

Mr. E. Jerome Kern, Community College
Technical Education Advisor,
Bureau of Community Colleges

"The Land-Grant Concept and Engineering Technician Education."

Mr. Kenneth Holderman
Director of Commonwealth Campuses
The Pennsylvania State University

1:00 - 2:00 p.m. Panel: The Establishment and Utilization of Curriculum Advisory Committees.

Chairman: Mr. Donald Hagen
Dean of Technology
Northampton County Area
Community College

Panelists: Dr. James D. Lawson, President
Butler County Community College

"The Advisory Committee and the Administration"

Mr. Paul Maleskey
Lehigh County Community College

"The Advisory Committee and the Faculty Member"

Dr. Herman Bean, Dentist

"The Advisory Committee As Seen By A Lay Member"

2:00 - 2:30 Coffee Intermission

2:30 - 3:30 Discussion Groups (Critique of Preceding Panel)

3:30 - 4:00 Concluding Remarks and Adjournment - Room 312

G. Registered Participants

Bacon, John W.
Box 22, Marwood
Butler, Pennsylvania 16047
Butler County Community College

Bealer, James E.
3417 Blue Ridge Drive
Bethlehem, Pennsylvania
Allentown Center

Bernlohr, George L.
150 Orchard Avenue
Butler, Pennsylvania 16001
Butler County Community College

Bressler, James P.
1813 Bloomingrove Road
Williamsport, Pennsylvania 17701
Williamsport Area Community College

Burger, Jack
2370 Main Street
Allentown, Pennsylvania 18078
Lehigh County Community College

Burns, Martha A.
723 Woods Street
Bellefonte, Pennsylvania
Center for the Study of Higher Education

Buttenfield, Elaine M.
3301 Charlemagne Circle
Pittsburgh, Pennsylvania
Community College of Beaver County

Collins, David Scott
243 South Patterson Street
State College, Pennsylvania 16801
Center for the Study of Higher Education

deMarrais, Le Roy W.
419 Maxwell Drive
Pittsburgh, Pennsylvania 15236
Community College of Allegheny County

Eisenstein, Herbert S.
2544 North Second Street
Harrisburg, Pennsylvania
Capitol Campus - P.S.U.

Elison, George W.
3135 Oxford Circle South
Allentown, Pennsylvania
Lehigh County Community College

Farneth, Harold E.
527 Foltz Drive
Verona, Pennsylvania 15147
Community College of Allegheny County

Ferenez, William R.
4301 Beaufort Hunt Drive
Harrisburg, Pennsylvania
Harrisburg Area Community College

Fibel, Lewis R.
509 Kerwin Ct.
Silver Spring, Maryland
State Board for Community Colleges

Foster, Robert J.
1137 Centre Lane
State College, Pennsylvania 16801
Pennsylvania State University

Frederick, Molly O.
1717 R. Street, N.W. - #302
Washington, D. C.
American Association of Junior Colleges

Gebhardtsbauer, Robert
4134 Kilmer Avenue
Allentown, Pennsylvania
Lehigh County Community College

Hawkes, Dennis A.
373 South College Avenue
Community College of Delaware County

Hill, Walton B.
522 Larchwood Avenue
Upper Darby, Pennsylvania
Community College of Delaware County

Homisak, William
1235 High Street
Williamsport, Pennsylvania 17701
Williamsport Area Community College

Horner, Richard
Box 11
Califon, New Jersey
Northampton County Area Community College

Ikenberry, Stanley U.
1512 West College Avenue
State College, Pennsylvania 16801
Pennsylvania State University

Johnston, S. Hartley
609 Third Avenue
Freedom, Pennsylvania
Community College of Beaver County

Keyzer, James A.
P. O. Box 36
Freedom, Pennsylvania
Community College of Beaver County

Knoebel, Robert M.
3524 September Drive
Camp Hill, Pennsylvania
Commonwealth of Pennsylvania
Department of Education

Koehnline, William A.
208 Allendale Way
Camp Hill, Pennsylvania 17011
Harrisburg Area Community College

Kotula, John R.
105 Danforth Place
Windybush, Delaware 19803 (Wilmington)
Delaware Technical & Community College

Leventhal, Jerome I.
1409 Maguire Lane
Warminster, Pennsylvania
Temple University

McCutcheon, George Albert
90 Sterling Avenue
Dallas, Pennsylvania
Luzerne Community College

McDowell, Richard W.
116 Crescent Pines Drive
Verona, Pennsylvania 15147
Community College of Allegheny County

Macaluso, Thomas Peter
Apt. B-308, 1295 N. Providence
Media, Pennsylvania
Community College of Delaware County

Maleskey, Paul
1117 Lehigh Parkway East
Allentown, Pennsylvania
Lehigh County Community College

Miller, Fred A.
2048 Kendon Drive, East
Pittsburgh, Pennsylvania 15221
Community College of Allegheny County

Mulvaney, Francis Charles
547 East Winona Avenue
Norwood, Pennsylvania
Community College of Delaware County

Oliver, Wilmot F.
821 Adams Drive
Brookhaven, Pennsylvania 19015
Community College of Delaware County

Piccoli, William A.
308 Haugh Drive
Pittsburgh, Pennsylvania
Community College of Allegheny County

Popp, Dr. Richard Joseph
58 Oakhurst Circle
Pittsburgh, Pennsylvania 15215
Allegheny Community College

Sabatino, Robert L.
52 Jones Street
Wilkes-Barre, Pennsylvania 18702
PSU, Wilkes-Barre Campus

Serotkin, Harry
309 Governor's Drive
Wallingford, Pennsylvania
Community College of Philadelphia

Shaffer, E. Bertrum
123 Woodland Road
Butler, Pennsylvania 16001
Butler County Community College

Skinner, Richard C.
233 Taylorsville Road
Yardley, Pennsylvania 19067
Bucks County Community College

Smith, Arthur E.
1511-B Rolling Glen Drive
Boothwyn, Pennsylvania
Community College of Delaware County

Snyder, Fred A.
2202 Rudy Road
Harrisburg, Pennsylvania 17104
Harrisburg Area Community College

Sussman, Herbert M.
1920 Beechwood Blvd.
Pittsburgh, Pennsylvania
Allegheny Campus - Community College

Swarup, Pande B.
3340 Harmor Lane
Bethlehem, Pennsylvania
Northampton County Area Community College

Ventura, Eugene F.
1520 Windcrest Drive
Pittsburgh, Pennsylvania 15206
Allegheny Community College

Walker, J. Robert
1943 Grove Avenue
Allentown, Pennsylvania
Lehigh County Community College

Wentz, William Joseph
205 Third Avenue
Freedom, Pennsylvania

Young, Patricia L.
2370 Main Street
Schnecksville, Pennsylvania 18078
Lehigh County Community College